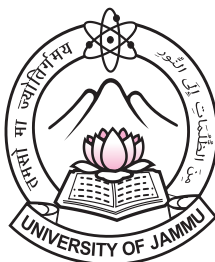


CENTRE FOR DISTANCE & ONLINE EDUCATION
UNIVERSITY OF JAMMU
JAMMU



SELF LEARNING MATERIAL
SESSION 2026 ONWARDS
M. A. HISTORY

SEMESTER –I

Unit-I, II, III, IV
Lesson Nos 1-21
Credit : 6

COURSE NO. HIST 104

DR. HINA ABROL
COURSE CO-ORDINATOR

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**SYLLABUS FOR THE EXAMINATION TO BE HELD IN THE
YEARS DECEMBER 2026, DECEMBER 2027 AND DECEMBER 2028.**

DETAILED SYLLABUS

COURSE NO. HIST104 SEMESTER: FIRST

COURSE TITLE : THE ANCIENT AND MEDIEVAL WORLD

Credit: 06

Maximum Marks: 100

- (a) **Major-Test Examination: 70**
- (b) **Minor-I: 10**
- (c) **Minor-II: 10**
- (d) **IAA=10**

Duration of Examination: 3.00 Hours.

Objective: The course is being developed with the objective to provide the learner an overview of major developments in the world prior to the modern times. The contents proposed for the course have been selected with a view to cover the major developments, main transition stages and, as far as possible, wide geographical regions

Unit-I Early Human Societies:

- I. Changing face of the earth and the evolution of man
- II. Paleolithic culture
- III. Mesolithic cultures
- IV. Art and religion

Unit-II Stage of Food production:

- I. Neolithic society and the beginnings of agriculture.
- II. Debate about the Neolithic Revolution
- III. Bronze Age Civilizations: Economy, and state structure
- IV. Advent of Iron: Debate on the advent of iron and its implications civilization impact

Unit-III State and Empire:

- I. Ancient Greece and the Roman Empire:
- II. Art and culture
- III. Rise of Slavery and Slave mode of production:
- IV. Decline of Slavery

Unit-IV Religious Development

- I. Zoroastrianism
- II. Judaism
- III. Christianity
- IV. Islam

SYLLABUS FOR THE EXAMINATION TO BE HELD IN THE YEARS
DECEMBER 2026, 2027 & 2028.

DETAILED SYLLABUS COURSE NO. HIST104

SEMESTER: FIRST

COURSE TITLE : THE ANCIENT AND MEDIEVAL WORLD NOTE

NOTE FOR PAPER SETTING FOR MAJOR TEST

- The question paper will be divided into two sections i.e. Section-A and Section-B. It will contain short and long answer type questions.
- **Section-A**, This section will contain four short answer type questions (100 words per question) and will be compulsory. These short answer type question will be from all the units. Each short answer type question will carry 2.5 marks. 2.5x4=10 marks
- **Section-B**, There will be a total of eight long answer type questions (two questions from each unit with internal choice) and the candidates will be required to answer one question from each unit. Each long answer type question will carry 15 marks. 4x15=60 marks.

The students shall be continuously evaluated during the conduct of each course on the basis of their performance as follows:-

Theory	Syllabus to be covered in the examination	Time allotted for the examination	Weightage of marks
Minor Test-I	Unit-I and Unit-II	Sixty Minutes	10 marks
Minor Test-II	Unit-III and Unit-IV	Sixty Minutes	10 marks
IAA	Home assignment		10 marks (two questions of 5 marks each)
Major Test	Unit I-IV	Three hours	70 marks

PRESCRIBED READING:

1. Burns and Ralph. World Civilizations. Cambridge History of Africa, Vol. I.
2. Gordon Childe, What Happened in History.
3. G. Clark, World Prehistory: A New Perspective.

4. B. Fagan, People of the Earth.
5. Amar Farooqui, Early Social Formations.
6. M .I. Finley ,The Ancient Economy.
7. Jacquetta Hawkes, First Civilisations.
8. G. Roux, Ancient Iraq.
9. Bai Shaoyi, An Outline History of China.
10. H.W.F Saggs, The Greatness that was Babylon.
11. B. Trigger, Ancient Egypt: A Social History.
12. UNESCO Series : History of Mankind, Vols .I–III./or New ed. History of Humanity.
13. R.J Wenke, Patterns in Prehistory.

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THE ANCIENT AND MEDIEVAL WORLD
EARLY HUMAN SOCIETIES

SEMESTER-I
COURSE NO. HIST104

UNIT-I
LESSON 1

CHANGING FACE OF THE EARTH

STRUCTURE

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- 1.2 Formation of the Solar System: Big Bang Theory**
- 1.3 Geological Time Scale: Introduction**
 - 1.3.1 Definition**
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- 1.4 The Earth through Time: Major Mass Extinctions**
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1.0 LEARNING OBJECTIVES AND OUTCOMES

Learning Objectives

The objective of this lesson is to enable you to:

- explain the changing face of the earth through ages.
- evaluate the formation of the solar system through Big-Bang theory.
- Examine the different geological time scale.
- Identify the major extinctions on the earth.

Learning Outcomes

After going through the lesson, you will have a clear understanding about:

- the different stages of earth's evolution.
- the Big Bang theory of formation of the solar system.
- the major mass extinctions on the earth.
- the different geological time scales.

1.1 INTRODUCTION

Dear learners, it is very important to understand the phenomenon of changing face of the earth to understand the human life on the earth. Changing face of the earth generally includes formation of the solar system as our earth is a part of solar system, different geological time scales through which the time period of the earth's evolution is divided and lastly the study of major mass extinctions on the earth. There are many theories are postulated to explain the formation of the solar system, but the Big-Bang theory explain it with scientific prove and it is widely accepted. Then comes the study of the earth and it is very much required to divide the time period scientifically to study the evolutionary process of the earth. Once our earth acquired the suitable conditions in which organism can develop we find the evolution of different kind of organism on the earth. However, our earth was in the process of continuous evolution and we saw different major mass extinctions on the earth. These mass extinctions are responsible for extinctions of some kind of species and provided a scope for survival and evolution of different kind of species. All these studies provide a scientific explanation to understand the formation of earth and evolution of life on the earth.

1.2 FORMATION OF THE SOLAR SYSTEM: BIG BANG THEORY

The Big Bang theory is an explanation of the early development of the Universe. According to this theory the Universe expanded from an extremely small, extremely hot, and extremely dense state. Since then, it has expanded and become less dense and cooler. The Big Bang is the best model used by astronomers to explain the creation of matter, space and time 13.7 billion years ago. The Big Bang theory is strongly supported by major scientific

discoveries – first, Hubble’s discovery of relationship between the distance of a galaxy from Earth and its speed; and second, discovery of cosmic-microwave background radiation.

The Hubble eXtreme Deep Field (XDF) discovered that the galaxies are far away from us and their light has taken 13.2 billion years to reach on the Earth. With the help of Hubble’s law scientists calculated that when the galaxies started moving apart. This calculation facilitated us to estimate the time period of the Big Bang occurrence and formation of the Universe. The Big Bang was followed by ‘inflation’ – a period of very rapid expansion and cooling. The Universe became transparent to light about 380000 years after the Big Bang. The gravity slowed the expansion of the Universe for the next several billion years. This expansion process was accelerated about 8 billion years after the Big Bang.

1.3 GEOLOGICAL TIME SCALE: INTRODUCTION

The **Geological Time Scale** is a scientific system used to organize and understand the vast history of the Earth. It divides Earth’s history into different intervals based on significant changes in geology, climate, and the evolution of life. These divisions help scientists study how the planet and living organisms have developed over time. The Geological Time Scale is essential for understanding Earth’s history in a systematic way. It helps scientists trace the evolution of life, study past environmental changes, and make connections between different geological events, providing a comprehensive framework for Earth’s development.

1.3.1 Definition: It is the major events occurred on the earth in the history of life evolutions, which provided the basis for classification of history of the Earth into different time scale. This division of time interval was done on the basis of evidences of the fossils available till now. This time scale is named as Geological Time Scale. It divides history of the world in a set of hierarchical divisions of geologic time based on geochronology and dating of the sequential events throughout the Earth’s history. The accepted divisions of the scale of geological time are – Age, Epoch, Period, Era, and Eon. It has been established by the geologists adopting the principles of relative dating of landform features and their stratigraphic successions. The principles followed in making the geological time scale are – Principle of Superposition, Nature of Horizontality, Relationship of Cross-Cutting, Inclusions, Unconformities, and Basis of Fossil Succession.

The boundaries of this time scale indicate the origin as well as extinction of a particular type of species of fauna or flora. A dinosaur fossil from a rock will indicate the rock is of Mesozoic era and Jurassic epoch during which dinosaurs lived.

1.3.2 Division of Geological Time Scale

EON:- The first major division of Geological time scale is called Eon. These are – Hadean (4570 to 3850 Ma), Archean (3850 to 2500 Ma), Proterozoic (2500 to 541 Ma), and Phanerozoic (540 Ma to present). Initial three EONs – Hadean, Archean and Proterozoic represent nearly ninety percent of the history of the Earth.

Hadean (4570 to 3850 Ma):- The Radiometric dating of the meteorites and oldest rocks suggests that the Earth is nearly 4500 Million years old. This was the period when the Earth received a lot of meteorite bombardments

on its surface. The rocks of this Eon have no evidence of any life forms.

Archean (3850 to 2500 Ma):- Archean Eon represents the time period on the Earth from 4000 to 2500 Million years ago. The evidences of prokaryotic life forms like blue-green algae and bacteria are found from the rocks of this Eon. During this Eon, evidences of 3500 million years ago are also noticed in the form of stromatolites on the different parts of the Earth.

Proterozoic (2500 to 541 Ma):- This eon has carried the evidences of multi-cellular organisms in the form of trace fossils like worm trails and worm holes. Geologists are of the opinion that the life forms of this eon have lacked shells and these rocks were devoid of coal, oil or natural gas. But rocks formed during this Eon contained iron ore formations in the form of hematite on the Earth. The most common fossils found in the rocks of this Eon are stromatolites formed by the blue green algae and bacteria.

Phanerozoic Eon (541 Ma to Present):- The Phanerozoic Eon refers the visible life on the Earth. Phanerozoic rocks are the most common rocks bearing evidences of various life forms. During this Eon majority of the macroscopic organisms like plants, animals, algae and fungi had flourished on the Earth. The animals evolved during this time appeared with external skeletons, outer shells and also vertebrates in its later phase.

ERA:- The Phanerozoic Eon has been divided into Paleozoic, Mesozoic and Cenozoic Era. The three Eras come with a “zoic” suffix which means with a zoological basis. The Pre-Phanerozoic time is usually referred as the Precambrian which includes three Eons as Hadean, Archean and Proterozoic. Major changes in the composition of faunas have observed during these three Eras of Phanerozoic. These three Eras have been characterized by the dominance of a particular group of animals and generally referred to as the “Age of Mammals”, “Age of Dinosaurs” and the “Age of Fishes”, respectively although other groups of animals and plants lived during these three eras.

- (i) **Paleozoic Era (541-252 Ma):** - Paleozoic Era is referred as the primary Era on the Earth. It includes six periods – (a) Cambrian, (b) Ordovician, (c) Silurian, (d) Devonian, (e) Carboniferous, and (f) Permian.
- (a) **Cambrian Period (541-485 Ma):-** The beginning of the Paleozoic Era is known as Cambrian Period. Its beginning is marked with the evolution of the organisms with shells. Trilobites, the mud-burrowing scavengers are considered as the index species of this Period. The emergence of a large number of multi-cellular animals during this period is referred as the “Cambrian Explosion” of invertebrates. The fossils of these multi-cellular animals are found in the rocks of the period.
- (b) **Ordovician Period (485-444 Ma):** This period is known as the “Years of Invertebrates”. Trilobites were one of the abundant species of this period. In this period, brachiopods and large cephalopods thrived in great abundance than those of the trilobites. For the first time fishes started appearing during this Ordovician period.
- (c) **Silurian Period (444-419 Ma):** The first plant started appearing during this Silurian Period. The presence of fossils of corals, brachiopods, trilobites and graptolites reveal the dominance of these animals during

this period. It is also named as the “age of Fishes” due to their abundance.

- (d) **Devonian Period (419-359 Ma):** Due to its domination this Period is also referred as the “Age of Fishes”. This period is marked with the evolution of Primitive sharks, insects and land plants. By the end of this Period, fossil evidence suggests the growth of forests. This period also saw the evolution of the lung fishes, lobe-finned fishes and true air-breathing amphibians.
- (e) **Carboniferous Period (359-299 Ma):** The Appearance of the first reptiles on the Earth’s surface marked this period. The evolution of large tropical swamps across the globe during this period provided the source of large local coal deposits across the world. During the Carboniferous Period, Britain was close to the equator. Limestone deposits carrying fossils of corals, brachiopods and trilobites thrived in shallow seas during this period. Some geologists have also attempted to divide the Carboniferous period into Pennsylvanian and Mississippian periods.
- (f) **Permian Period (299-252 Ma):** The first fossils of this period were discovered in 1841 by Roderick Murchison in Russia. The name Permian has been adopted after the discovery of the fossils from the region of Perm. The Permian and Carboniferous periods are popularly named as the “age of the Amphibians”. Towards the end of this Period the dominant trilobites and many more marine species started becoming extinct due to the “Great Paleozoic Extinction”. Theory of plate tectonics suggested that by the end of the Permian Period. Earlier all the continents were together as one super continent called Pangaea which subsequently started breaking and spreading into the present configuration.
- (ii) **Mesozoic Era (252-66 Ma):** - This Era consists of three distinct periods – Triassic, Jurassic and Cretaceous. This era is popularly named as the “Age of Reptiles” known for evolution and extinction of the Dinosaurs family of the Earth.
 - (a) **Triassic Period (252-201 Ma):** This Period was characterized by the predominance of Dinosaurs species across the globe. The geologic formations of this period are characterized by mudstones and red sandstone. Lack of fossils in these rocks suggests that the land environment during this period. Geologists have inferred that the formations of mudstones, salt and sandstones in the river valleys, lakes and deserts during this period. It has been inferred as a prevailing hot climate and dry environment during the period.
 - (b) **Jurassic Period (201-145 Ma):** The fossil evidences of this period established the fact that the dominant species of this time were Dinosaurs, reptiles and birds. During early Jurassic period, the super continent “Pangaea” started breaking and the Atlantic ocean started opening with the west ward shifting of the Americas. The westward moving Atlantic plate started overriding the Pacific plate. The subducting Pacific plates led to the formation of the western Rocky and Andes mountains.
 - (c) **Cretaceous Period (145-66 Ma):** The Cretaceous period has been marked with the end of the dinosaurs’. There was a major extinction event towards the end of this period which ended the dinosaurs’ family from the Earth’s surface. The fall of a large meteorite in Yucatan Peninsula of Mexico during this

period formed a huge impact crater named Chicxulub. This period also experienced evolution of the first flowering plants on the Earth.

- (iii) **Cenozoic Era (0-33 Ma)**: This era consists of two distinct periods – Tertiary and Quaternary. The Tertiary period again is divided into two periods of Paleogene and Neogene.
- (a) **Paleogene period (66-23 Ma)**: Early part of the Tertiary period is known as Paleogene period. The major extinction of entire dinosaur families, more than half of the plant and animal species had already been taken place before this period. This period has been subdivided into the Paleocene Epoch (66-56 Ma), the Eocene Epoch (56-33.9 Ma), and the Oligocene Epoch (33.9-23 Ma). During this Paleogene Period, Britain was in a lower latitudinal zone having a warm climate. Gradually Britain turned cool when it drifted to the present location.
- (b) **Neogene Period (23-2.6 Ma)**: The Neogene period is further subdivided into the Miocene and Pliocene Epoch with time span ranging from 23 to 5.3 Ma and 5.3 to 2.6 Ma, respectively.
- (c) **Quaternary Period (2.6 Ma- 0)**: The Quaternary Period is further divided into the Pleistocene Epoch from 2.6 to 0.01 Ma and the Holocene Epoch from 0.01 Ma to present. By the beginning of the Quaternary Period, major plate tectonic movements and there were many modifications in the distribution and spread of continents. This period was dominated by the Glaciation and erosion process marked with the emergence of Human beings. Glaciers covered the middle and north of Britain, shaping the today's landscape by the end of this period.

Check Your Progress (CYP)/ Activity –I

Based on the understanding of the previous section, answer these questions in your own words:

- Q1. Hubble's discovery helped to understand the Universe, discuss in your own words.

- Q2. Describe the division of Geological time scale.

1.4 THE EARTH THROUGH TIME: MAJOR MASS EXTINCTIONS

Throughout Earth's history, life has evolved and diversified, but it has also faced several catastrophic events known as **mass extinctions** – periods when a large number of species disappeared in a relatively short time. Scientists generally recognize five major mass extinctions. These events reshaped life on Earth, allowing new species to evolve and dominate, highlighting both the fragility and resilience of life over time.

1.4.1 Meaning of Extinction: Disappearance of the last individual of any species then that species is considered extinct species. Therefore, any species is said to be **extinct** when no individual of that species is available anywhere on the earth. Extinctions of the species disrupt the ecological processes – pollination and distribution of seed – and collapse of the food chain. This causes further more extinction. The causes can be divided into – Natural causes or Human induced causes.

1.4.2 Causes of Extinction:

Natural causes of extinction: The important natural causes of extinctions are – Climate change, Catastrophe, Disease / Epidemic, Spread of Invasive Species, Extermination, and Eco System Imbalance.

- (i) **Climate Change:** The major extinctions on the earth have been seen as a result of change in climatic conditions. For examples, the recently occurred ice age caused the major extinction on the earth. Further, the creatures adapted in old became extinct due to extreme warming of the environment. Atmospheric changes like relatively fast evolution of plants suddenly increased the level of oxygen level which caused disappearance of almost all other life forms. On the other hand methane increased suddenly in the atmosphere resulted into the end of great lives.
- (ii) **Catastrophe:** The catastrophic events also cause extinctions. The atmosphere became so toxic and hot due to volcanic eruptions that many species could not survive and became extinct. A meteor fell about 65 million years ago and its huge impact destroyed the affected site completely leading to disappearance of many species. For example, the dinosaurs vanished from the earth 65 million years ago due to a meteor collision on the Yucatan peninsula in Mexico.
- (iii) **Disease / Epidemic:** Disease or Epidemics spread due to change in climatic conditions eventually led to the extinction of species on the earth. Different kind of diseases became the agent of extinction of many species. The anthropogenic changes like transportation of diseases and hosts, destruction and fragmentation of natural habitats and climate change also enhance the diseases emergence threat.
- (iv) **Invasive Species:** Invasive species are also act as an agent of mass extinction. They spread on the territory which is not considered their natural habitat and capture it to utilize the resources available there. This creates crisis of resources for the species of that habitats there and eventually results into their extinction. As it increases the competitions for the resources and raises the question of survival. For example, Invasive species are considered as prime cause of extinction in the Island's ecosystems. Use of predators, parasites and pests by human beings are considered as the prime cause leading to disappearance

of local flora and fauna. For Example, introduction of European red foxes by human being were responsible for the extinction of some natural species such as desert rat, kangaroo and feral cats.

- (v) **Extermination:** Movement of a plant or animal accidentally from one ecosystem in another causes the extermination of the native population. The deliberate eliminations and exterminations by humans both have been witnessed in the recent two centuries. This led to the disappearance of many species from the earth. It is considered that mastodons were eliminated by Stone Age humans from North America.
- (vi) **Ecosystem Imbalance:** Every organism lives in their ecosystem with a relationship of interdependence on other species. Disappearance of any one key species from their ecosystem leads to the elimination of many others. For example, absence of sharks in their habitats caused disturbance in their ecological balance and leads to the death of other species within their specific ecosystem.

Causes of Human Induced Extinction: According to IUCN study, extinction due to human activities is not a new phenomenon. But the matter of concern is the increased rate of extinction. The experts suggest that this rapid loss of species is much higher in comparison to the natural extinction rate. The study indicates that the large bodied animals are more vulnerable than small bodied species in the human induced changes.

- (i) **Overexploitation:** Irresponsible hunting and harvesting affected the sustainability and led to over exploitation in the nature. It resulted into drastic reduction in population of the species. The study shows that plants and animals are over exploited for the different human use. Human being hunted the elephants for the ivory, the tiger for the fur and organs, tuna for deliciousness and the shark's fin for its medicinal effect which resulted into their disappearance. According to a report released by the WWF, only the overhunting caused for 23% of extinctions.
- (ii) **Pollution:** Pollution has become the important determinants of wild life and biodiversity. Use of Pesticides and carbon emissions affected the ecosystems severely. Contamination of air, soil and sea by unnatural chemicals led to the change in metabolism of the organism. Carbon monoxide, sulphur dioxide and nitrogen oxides are considered major air pollutants. Mercury, cadmium and lead are considered as major water and soil pollutants in the environment. Acid deposition forms acid rain, acid snow, and acid smog. All these factors contribute in the of extinctions species on the earth at a very high rate.
- (iii) **Loss of Habitat:** The major cause of loss of habitat is natural disasters and climate change as it destroys the habitats. However, human population is considered as the most important cause of extinctions today. The land use pattern such as deforestation, urbanization, agricultural activities, and hydro power projects destroy the natural habitat of the species.

1.4.3 MAJOR MASS EXTINCTIONS

Mass extinction is the phenomenon in which a considerable number of animal species become extinct simultaneously due to some traumatic happening in the environment. Therefore, they identified mass extinctions with the fossil records. The mass extinction did not happen instantaneously but was a combination of a number of extinction

events leaving its devastating effects on the earth.

According to fossil reports available, five major episodes were identified indicating major mass extinctions. A large number of species became disappear during the mass extinction. The sixth mass extinction began around 30,000 years ago which is continue in progress.

1. **The Ordovician-Silurian Extinction:** It is considered as the first mass extinction on the earth. It occurred about 439 million years ago on the earth. On the Geological time scale it is placed during the Hirnantian Age of Ordovician Period and followed by Rhuddanian Age of the Silurian Period. The first phase of the Ordovician extinction occurred due to rapid cooling at end of the Ordovician Period and the second phase was due to the fall of sea-level caused by the glaciation.

Scientist's latest view suggests that galactic Bow Shock event as a possible reason for the Ordovician-Silurian extinction. According to this explanation, our galaxy while moving rapidly compresses the intergalactic gas available in the way. This exposed the Solar system to the cosmic rays as it went out of the protective magnetic field due to the Bow Shock by the Milky Way. Thus, the scientists considered it a major cause of this extinction.

2. **The Devonian Extinction:** This extinction took place about 360 million years ago. Another global cooling was the result of this extinction which led the lowering of sea level and disappeared about 75 % all species. There is another explanation of this extinction is a comet collision. During this extinction the tropical species such as bryozoans, fish, corals, ammonoids, and brachiopods were affected most. The study suggests that this extinction affected the marine animals most whereas, fresh water fish were affected least. Acanthodians, agnathans, and could not survive in this mass extinction and they disappeared once for all. Another interesting theories about this extinction is the 'Devonian Plant Hypothesis' theory. It is proposed by Thomas Algeo, J. Barry Manard, Robert Berner, and Stephen Schekler in the year 1995. According to this theory, the rapid spread of plants on the land eventually caused the mass extinction in the ocean of tropical regions.

3. **The Permian-Triassic Extinction:** This mass extinction occurred about 251 million years ago at the border of Permian period and Triassic period. Scientist Douglas Erwin marked it as the 'Mother of Mass Extinctions'. This mass extinction was identified as starting of the Mesozoic Era with end of the Paleozoic Era by British geologists John Phillips. This extinction is also called the 'Great Dying' because it wiped out the 96 percent of all species on the earth and half of all families of living species. It is worth mentioning here that the existing living beings in the last 250 million years are all have evolved themselves from these survived 4 percent of life in this extinction. This period witnessed the extinction of mollusks, brachiopods, trilobites, and many other vertebrates. Even insects became disappear during this mass extinction as it was the only mass extinction in which insect became extinct in their history. It is considered as a major watershed in the history of life in the ocean.

4. **The Triassic-Jurassic Extinction:** The Triassic-Jurassic extinction occurred about 205 million years

ago which was considered to be spread over 18 million years and ranked fourth in the severity. This mass extinction event was a combination of smaller extinctions periods on the earth. This period was known for the evolution of dinosaur's family as it evacuated terrestrial ecological niches. The scientists suggest that the volcanic eruptions, a asteroid collision, or both, would have caused the change in climatic conditions leading to the end of so many species on the earth. The study shows that more than 95 percent of marine species and 70 percent of terrestrial species disappeared during this period. This was the era of rapid warming in which most of the vertebrates were killed. The archosaurs could survive and became the ancestors of the dinosaurs.

5. **Cretaceous–Paleogene Extinction:** This extinction occurred about 66 million years ago. It geological time line is very close to the boundary of Cretaceous and Paleogene periods. It wiped out almost 80 percent of all the species of animals and extinct the dinosaurs. Other extinct animals were marine reptiles, ammonites, bivalves, microscopic marine planktons, and echinoderms. This extinction was characterized by the absence of food and oxygen, which affected mostly the bigger animals. The smaller animals in survived this unfavorable condition as they require less oxygen to breath and were able to store food. This mass extinction disappeared 75 percent of life on the earth. But, it provided an environment for the evolution of sharks in the sea and mammals on the land. The asteroids collision is considered to be the most important reason of this mass extinction on the earth.

Sixth Extinction: Most of these extinctionson the earth were caused by natural catastrophe. The volcanic eruption activities and collisions of comets are considered important cause for the mass extinctions. But our Earth is in the middle of another mass extinction i.e. the sixth mass extinction. The current fate of Tigers, Blue fin Tuna, Gorillas, and Rhinos is not natural but human caused. It is anticipated by the scholars that this extinction isgoing to be the most devastative extinction event on the earth.

As the human activities play a major role for this Extinction therefore, it is named as the Anthropocene / Age of Man extinction. Introduction of exoticspecies, increasing temperatures, and simplification of land forms due to human actions are resulting in to homogenization offaunas on the earth. Ifleft unchecked, it could lead to the disappearance of wholelines of phyla. According to the scientists this extinction crisis is going to be exclusive in Earth's historywhich posses the following unique features:-

- (i) Spread of non-native species,
- (ii) Human beings aredriving the earth's primary production
- (iii) Evolution directed by human actions, and
- (iv) Human beingsact as the top predator

Check Your Progress (CYP)/ Activity –II

Based on the understanding of the previous section, answer these questions in your own words:

Q1. Discuss the different causes of extinction on the earth.

Q2. Write a short note on the major mass extinction on the earth.

1.5 LET US SUM UP

Big Bang is considered as the most relevant theory for formation of the earth. History of the earth is divided into different time scales on the basis of major events in the history of life on the earth. It is divided into Eon, Eon is divided into Era, Era is divided into Period, Period is divided into Epoch and Epoch is further divided into Age. Extinction is known as the disappearance of the last individual of the any species on the earth. It may be caused by natural activities or by human induced activities. Our earth has faced five major mass extinctions. They are – The Ordovician-Silurian Extinction, The Devonian Extinction, The Permian-Triassic Extinction, The Triassic-Jurassic Extinction, and Cretaceous–Paleogene Extinction. Presently, we are in middle of the sixth mass extinction, which is exclusively caused by the human actions.

1.6 GLOSSARY

The Hubble eXtreme Deep Field (XDF): Observations taken over the past decade the Hubbles.

WWF: World Wild Fund

IUCN: International Union for Conservation of Nature

Acid rain: It is a form of precipitation containing chemicals like sulphuric acid and nitric acid.

Bow shock: a bow shock forms when material in front of a moving object is compressed.

Archosaurs: They are considered as ancestors of the dinosaurs.

1.7 EXAMINATION ORIENTED QUESTIONS

- Q1. Find out the present time on the Geological Time Scale.
- Q2. Define extinction and write down the different causes of extinction on the earth.
- Q3. Write a short note on the sixth mass extinction on the earth.

1.8 LESSON END EXERCISES

- Q1. Explain the Geological Time Scale.
- Q2. Examine the major five extinctions in history of the earth.

1.9 ANSWER KEY

CYP-I

- Q1. Refer sub-section 1.2
- Q2. Refer sub-section 1.3

CYP-II

- Q1. Refer sub-section 1.4.2
- Q2. Refer sub-section 1.4.3

1.10 SUGGESTED READINGS

- Brannen, Peter; *“The Ends of the World: Volcanic Apocalypses, Lethal Oceans, and Our Quest to Understand Earth’s Past Mass Extinctions”*; 2017.
- Kolbert, Elizabeth; *“The Sixth Extinction: An Unnatural History”*; 2014.
- Raup, David M. & Stanley Steven M.; *“Principles of Paleontology”*.
- Felix Gradstein, James G. Ogg, Mark D. Schmitz, Gabi M. Ogg (Eds.); *“The Geologic Time Scale 2020”*; 2021.

EARLY HUMAN SOCIETIES

SEMESTER-I

COURSE NO. HIST104

UNIT-I

LESSON 2

THE EVOLUTION OF MAN

2.0 Learning Objectives and Outcomes

2.1 Introduction

2.2 Theories of the Evolution of Life

2.2.1 Lemarck's Theory of Evolution

2.2.2 Darwin's Theory of Evolution

2.2.3 Hugo de Vries's Theory of Evolution

2.3 Evolution of Human

2.3.1 Prehuman Evolution

2.3.2 Human Evolution

2.3.3 Human ancestral forms

2.4 Let us sum up

2.5 Glossary

2.6 Examination Oriented Questions

2.7 Lesson End Exercises

2.8 Answer Key

2.9 Suggested Readings

2.0 LEARNING OBJECTIVES AND OUTCOMES

Learning Objectives

The objective of this lesson is to enable you to:

- explain the human evolution on the earth.

- evaluate the different theories related to human evolution.
- Examine the process of human evolution.
- Identify the stages of human evolution and acquired specific features.

Learning Outcomes

After going through the lesson, you will have a clear understanding about:

- the different theories related to human evolution.
- the process of evolution of man.
- the stages of human evolution.
- the acquired distinctive features by human in the process of evolution.

2.1 INTRODUCTION

Dear learners, in the previous lesson you understood about the changing faces of our Earth. Now, you will come to know about the evolution of man on the Earth. The evolution of man is one of the most significant themes in the study of human history, as it seeks to explain the biological, cultural, and social development of human beings from their earliest ancestors to modern Homo sapiens. Rooted in the principles of biological evolution, this topic examines how humans gradually evolved from primitive, ape-like forms through a long process of adaptation influenced by environmental changes, natural selection, and genetic variation. The study of human evolution is inherently interdisciplinary, drawing evidence from archaeology, palaeontology, physical anthropology, genetics, and geology.

Understanding the evolution of man enables historians to trace the origins of key human characteristics such as upright posture, bipedal locomotion, increased brain capacity, tool-making ability, language, and social organization. Fossil remains, stone tools, and other archaeological findings provide crucial insights into different stages of human evolution, including forms such as Australopithecus, Homo habilis, Homo erectus, Neanderthals, and early modern humans. Theories proposed by thinkers like Lamarck, Darwin, and Hugo de Vries have played a vital role in shaping scientific interpretations of evolutionary change.

From a historical perspective, the evolution of man marks the transition from biological evolution to cultural evolution, laying the foundation for the emergence of society, culture, and civilization. Thus, the study of human evolution not only explains the physical transformation of humans but also helps in understanding the deeper roots of human behavior, creativity, and social life.

2.2 THEORIES OF THE EVOLUTION OF LIFE

There are several theories have been postulated to explain the mechanism of evolution of life on the earth. Important theories are as follows:

1. Lemarck's Theory of Evolution
2. Darwin's Theory of Evolution
3. Hugo de Vries's theory of Evolution

2.2.1 Lemarck's Theory of Evolution

Theory of inheritance of acquired characters was postulated by a French biologist Chevalier de Lemarck in his famous book 'Philosophie zoologique'. According to him, organisms are evolved from the pre-existing organisms with modifications in them. This process of evolution is a slow process where the characters are acquired over the course of time generations to generations. This theory has three different assumptions – New Needs, Acquisition of Characters and Inheritance of Acquired Characters.

- (i) **New Needs:** Every organism is required to adapt to survive and maintain their existence in the changing environmental conditions of the earth. This necessary requirement generates special efforts into the organism to fulfill its new needs for adaptation. This effort may need just change in habit or behavior of the organism for their survival. This new habit includes fresh use or extensive use of certain organs or structure of the body or disuse of the organ.
- (ii) **Acquisition of Characters:** There are three ways to acquire the characters required to adapt into changed environmental conditions – (a) **Innate Tendency** – It is observed that there is an innate tendency found in each organism to acquire greater complexity and perfection to perform any functions. The organism acquires better and better adaptation to the changed environment in the process of achieving perfection. (b) **Use or disuse of organs:** Use and disuse of organ affect their shape, structure, and efficiency of functioning. More usage of a particular organ brings additional strength, size and more efficiency. In contrast, disuse or underusage of organ gradually makes them weaker and smaller and finally they may disappear as well. Thus, this differential usage of organ allowed the additional character in the body structure during the life span of an organism. (c) **Environmental factors:** Variation in environmental factors such as humidity, light, temperature, wind, enemies, etc. affects the living things and brings changes in their life style and habits. The combined effect of use and disuse of organ and influence of environmental factors, results into the change in the body of organism known as 'acquired characters'.
- (iii) **Inheritance of Acquired Characters:** It is character acquired by one generation and transmitted to the new generation and subsequently newer characters are added in the next generation in order to acquire perfection.

Lemarck explained the evolution of various animals on the earth. He uses his hypothesis to explain the long neck and forelimbs of Giraffe. According to this theory, the giraffe is evolved from the short height deer like ancestor. These ancestors are living in the barren place and surviving by using leaves available on the trees for their food requirement. In order to reach the leaves on the tree, it stretched its neck and forelimbs which resulted in the form of elongated organs. These acquired characteristics of the first generation gradually passed on to the subsequent

generation and continuous stretching accumulates to evolve giraffe having long neck and forearms over the course of few generations. This theory is also used to explain the large biceps muscle of Blacksmiths as they are required to do rigorous hammering in their profession. Similarly, the rabbit have well developed pinna muscle to facilitate them to move the ear to receive sound waves of their enemy from different directions. Ducks can move into the water for food and protection by spreading their toes to float on water. The snakes are considered to be developed from the lizard like ancestor having two pairs of fully developed legs. In order to ensure protection from the mammals they prefer to stay in dense vegetative places and narrow spaces like holes. For this, they stretch their body to hide in a narrow space and stopped using their legs. The continuous stretching of the body and none use of legs developed them into cylindrical shape and they lost their legs. Another example validating this theory is that the deer has acquired speed through continuous running in a process to protect himself from the enemies. Similarly, the cave animals stay in low light environment and does not use eye and as a result they lost their vision over the course of time.

However, the Lamarck's theory has failed to explain several observations. The initial two assumptions – new needs are created by a change in the environment and these characters are acquired by use/disuse of organ and environmental factors are accepted. The third assumption inheritance of acquired characters to the subsequent generation is criticized by the scholars. August Weismann has provided a substantial argument in the criticism of Lamarck's theory with the help of an experiment on rat. In his experiment he cut the tails of rat for eighty generations but, it did not produce rats without tail.

Weismann's this theory is known as the theory of 'continuity of germplasm'. He explained that animals have two types of cells – Somatic cells and germ cells. The nuclei present in germ cell are responsible for inheritance of characters and the nuclei of somatic cells respond to the environmental factors and their use/disuse. This means that the acquired characters remain within the somatic cells. Hence, this theory explains that acquired characters are not inherited.

For examples; wearing of tight garments by European women to maintain slender waist could not inherit their children with slender waist. Wearing of tight shoes by Chinese women to have small feet could not inherit it in their children. It is not seen that child of athletes is born with powerful muscle. It is not necessary that children of noble laureate are as intelligent as their parents. Therefore, the evidence for the inheritance of acquired character revived the Lamarck theory as Neo-lamarckism.

2.2.2 Darwin's Theory of Evolution

Charles Darwin travelled for five years expedition around the world on the ship named H.M.S Beagle. During his journey, he made observation of several animals and plants and keenly observed the similarities among organisms and draw evolutionary relationship. Economist Thomas Malthus's report on workers explaining competition between species leads to the struggle for existence and Wallace's view led Charles Darwin to propose the theory of natural selection in his book 'Origin of Species'.

The theory of natural selection is based on – (i) Rapid Multiplication ability of organism, (ii) Limited natural

resources, (iii) Struggle for existence, (iv) Variation, (v) Natural selection, (vi) Inheritance of useful variations, and (vii) Formation of new Species.

- (i) **Rapid Multiplication ability of organism:** Every organism reproduces to ensure the continuance of their species and they multiply themselves in geometrical progression. For examples, Paramecium multiplies themselves three times in 48 hours and Plant produces thousands of seeds every year for their continuance.
- (ii) **Limited natural resources:** It is observed that population of individual species remain constant on the earth. It is because increase in population requires more space and food. And the amount of basic materials responsible for food production is limited in the universe. Hence, the availability of limited natural resources does not allow the population of organism beyond the limit and equilibrium is reached.
- (iii) **Struggle for existence:** To fulfill the basic requirements of food, water, space, mate to reproduce and security from enemies every individual organism is in a competition with each other. This competition is known as 'struggle for existence'. This struggle for an individual can be of three types – (a) **Intraspecific Struggle** i.e. the competition between same species. For example, fight between two dogs for a piece of meat, war among different human etc. (b) **Interspecific Struggle** i.e. the competition between the different species. For example, tiger attacks on deer for food. (c) **Environmental Struggle** i.e. struggle of every individual species against the change in environment.
- (iv) **Variation:** Every individual is different from other individual in several aspects. Even the off springs are different in many aspects from their parents. Therefore, two individuals can be different from each other in their behavior, color, size, strength etc.
- (v) **Natural Selection:** It is observed that due to variations among different individuals, they struggle for their existence with different potentials. The variation in an individual provides capacity to survive and complete its life cycle in a comfortable manner. At the same time, unfavorable variations lead the individuals to struggle against the every odd and they may not able to complete even their normal life cycle. For example, fast running deer has better chance to escape from the tiger compared to the slow runner. Darwin and Wallace recognized the environment as the principal factor for natural selection. Hence, natural selection is the ability to adapt into the changed environment. For example, plants having ability to hold more water will ultimately survive in comparison to plants with the physical strength, height and other characters.
- (vi) **Inheritance of useful variations:** The individual survived due to unique variation, mate and produces their off spring to complete their life-cycle. In this process, they transfer the useful variations to the next generations and allow the individual to multiply it. Darwin believed that any variation which helps the individual to survive and help for struggle will be inherited. According to him, these variations may be acquired or inheritable.
- (vii) **Formation of new Species:** Darwin state that as a result of struggle and natural selection, only the individual

fits to the environmental conditions will survive and complete its life-cycle. The variation favoring will be inherited to the next generation whereas unfavorable variation will be discarded. Due to this continuous natural selection, a new organism will evolve which will be different from their ancestral form.

2.2.3 Hugo de Vries's Theory of Evolution

The theories propounded by the Lemarck or Darwin are based on the population study but both theories could not be able to explain the origin of variations and their mode of transmission from one generation to next generation. To understand this gap, Dutch botanist, Hugo de Vries has put forward the mutation theory in 1901. According to him, the new species arise from the pre-existing one in a single generation by sudden appearance of new features through a genetic variation known as mutations.

De Vries proposed that evolution is a sudden, jerky and discontinuous process rather than continuous and gradual. He termed the process as single step large mutation. In this process, natural selection works on mutation and preserve the mutations found useful whereas eliminates the harmful mutants.

To prove this he proposed mechanism of evolution conducted an experiment on plant named Evening Primrose (*Oenothera lamarckiana*). In his experiment he, observed that in each generation, majority of the offsprings are similar to their parents but it few offsprings are with variants. In addition, he found that mutations appeared suddenly and were inherited by offsprings.

Important conclusions from Huge De Vries Mutation Theory are as follows:

- (i) Mutations are the initiator factor for evolution.
- (ii) Mutants are non-predictable, it occur suddenly and produce their effect instantly.
- (iii) No intermediate stage between appearance of mutant form and parent plants.
- (iv) Mutations are cumulative in nature and occur on multiple occasions
- (v) A single mutation may give rise to new species
- (iv) Environmental factors contribute for the growth of beneficial mutants and eliminate not useful mutations

Check Your Progress (CYP) –I

Based on the understanding of the previous section, answer these questions in your own words:

Q1 Discuss the Darwin's theory of evolution.

Q2. Write a short note on Hugo de Vries's theory of evolution.

2.3 EVOLUTION OF HUMAN

Human belongs to order primates. Other members of the same order were lemurs, lorises, tarsiers, monkey and apes. Human are closer to the ape, which in turn, are closer to the older world monkey. Together, human, monkey and ape belongs to suborder anthropoidea.

2.3.1 Prehuman Evolution: Human evolution starts with the appearance of first mammals on the earth. Mammals are further evolved into different classes including primates to which man belongs. Mammals appeared on earth in the Jurassic period about 195 million years ago. They are considered to be originated from the common ancestor, cotylosaurs or stem reptiles. After the extinction of dinosaurs, mammals evolved themselves into a variety of forms to capture the available space on earth.

The primates appeared about 65 million years ago from the shrew link small insectivores. It gave rise to primitive primates such as lemurs and tarsiers. These primates are termed as prosimians i.e. the animals appeared before monkey and apes. These mammals have acquired five important features to maintain tree life – Bipedal Locomotion, Grasping Hand and Feet, Stereoscopic Vision, Reduction in Snout and Enlargement of Brain.

2.3.2 Human Evolution: It is believed to be that human evolution occurred in Asia and Africa. The closest relative of human in primate is monkey and apes as Tarsiers diverged into the Anthropoids such as monkey, ape and humans. Monkey and tailless primates (Apes and man) evolve independently 36 millions year ago from Tarsoidea stock. The monkey preferred to live arboreal life and adapted for this purpose. They evolved to jump from branch to branch and leaning on tree. The enlarged brain capacity has allowed monkeys to learn and for precise control of movement. The evolutionary lines of monkey and apes have several stages, starting from tarsiers. These are – Paeapithecus, Propithecus, Dryopithecus and Proconsul.

Parapithecus are earliest fossil form of monkey, ape and man is available. These fossils are found in lower Oligocene epoch in Egypt. The old world monkeys are diverged from the main trunk of primate evolution in the Oligocene. **Propithecus** are another evolutionary line; developed from main trunk in Miocene about 10 million years ago give rise to gibbons in two stages named Propliopithecus and Pliopithecus. **Dryopithecus** is considered as fossil ape and a common ancestor of great ape and man. These ancestral forms were living in the early Miocene. It was similar to chimpanzee except equal length of legs and hands.

2.3.3 Human ancestral forms: The characteristics of different human ancestral forms are –

(a) **Ramapithecus** was the primitive ape like primate, lived on tree and occasionally travelled and ate on

ground. It survived life on nuts and food grains, as it lacks well developed canines and molars. These ancestral forms become extinct almost 7 million years ago.

- (b) **Australopithecus** are considered as first Ape-man. First report of these ancient forms on the earth is 4-5 million years ago in South Africa. He was 1.05 meter high and was mainly living terrestrial creature with bipedal locomotion. There was no evidence available that these ancestral forms can be able to make or use tools. The cranial capacity was 500 cm³ but had small canine and incisor teeth and short fingers. They can be able to walk in upright posture.
- (c) **Homo Habilis:** Australopithecus give rise to Homo Hibilis around 2 million years ago in Pleistocene. He was 1.5-1.8 meter high and had small canines and light jaw. The available fossil data indicate the first usage of tools by these ancestral forms. The cranial capacity was 650-800cm³. He is more closure to the man like features than ape. He was carnivorous and hunted large animals. He was maintaining a social life, started living in caves and cared for young one.
- (d) **Homo Erectus:** Homo Erectus evolved from Homo Habilis around 1.7 million years ago in Pleistocene. He was 1.5-1.8 meter tall and had erect posture. He was capable of making fine quality stone and bone tools, hunted big games and knew use of fire. The cranial capacity was 800-1300 cm³. He was omnivorous and probably ate meat. By 150,000 year ago, Homo Erectus migrated to Asia, and Europe. The fossils were found in Java, Peking in china and Heidelberg in Germany, and these fossils were termed as Java-ape man (Homo Erectus Erectus), Peking man (Homo Erectus Pekinensis) and Heidelberg-Man (Homo Erectus Heidelbergensis).
- (e) **Homo Neanderthalensis:** These early men were inhabited in southern Europe and central Asia during Pleistocene about 35000-100,000 years ago. He was 1.5-1.66 meter erect posture, strong shoulders and arms, powerful hands and large skull with thick bones. The cranial capacity was 1300-1600cm³, almost equal to the modern man. They have flat cranium, sloping forehead, thin large orbits, heavy brow ridges, protruding jaws, strong mandibles and no chin. These were known to live in cave or probably known to build their own hut-like shelters. There are reports for them being able to made flint flake tools, skilled tools, used animal hides as clothing, knew the use of fire and perform rituals such as buried their dead. They were omnivorous and had not been doing agriculture or animal domestication. They were known to have migratory habits in response to climatic changes and as a result they were spread to South Asia and Africa.
- (f) **Cromagnon Man:** The Cromagnon Man was 1.8 meter tall with sturdy, less hairy skin and has cranial capacity of 1650cm³. Cromagnan man lived in families in caves. There walking posture was erect and they can be able to make fine sophisticated tools, were fine hunters and knew the use of fire. They were using skin of animal as cloth. They were known to made ivory ornaments. They were still not practicing agriculture and animal domestication.
- (g) **Homo Sapiens or Modern Man:** The modern man was supposed to appear around 25,000 years ago

and started spreading all over the world around 10,000 years ago. He has modified slightly morphological changes, such as thinning of skull bones, lower cranial capacity (1300-1600cm³) and development of four curves in vertebral column. He lacks efficient mechanism of biting, power of smell, feeble eye sight and hearing ability. But modern man compensated these things with the development of sophisticated tools and techniques. This has made him the most dominant animals on earth. He understands the importance to agriculture and domestic animals.

Important Features related to the Human Evolution: The important striking features during the evolution of human from ape like animal are as follows:-

- (i) Erect posture and bipedal movement on legs
- (ii) Increase in cranial capacity and intelligence
- (iii) Broadening of forehead with vertical elevation
- (iv) Stereoscopic Vision
- (v) Reduction in size of pinna
- (vi) Formation of chin
- (vii) Increase in mobility of neck to see round.
- (viii) Reduction in body hair.
- (ix) Development of curves in vertebral column for erect posture.
- (x) Increase in Height.
- (xi) No specific breeding season and continuous gametogenesis in the gonads.

Check Your Progress (CYP) –II

Based on the understanding of the previous section, answer these questions in your own words:

Q1. Discuss the prehuman evolution.

Q2. Write down the important features related to the human evolution.

2.4 LET US SUM UP

Several explanations have been proposed to account for the process through which life evolved on Earth. Among these, three theories are considered especially significant: **Lamarck's theory of evolution**, which emphasizes the inheritance of acquired characteristics; **Darwin's theory of evolution**, which explains evolutionary change through natural selection; and **Hugo de Vries' mutation theory**, which highlights sudden genetic variations as a driving force of evolution.

Humans share a close evolutionary relationship with apes, while apes are closely related to Old World monkeys. Collectively, humans, apes, and monkeys are classified under the suborder **Anthropoidea**. The evolutionary lineage of humans includes several ancestral forms, beginning with **Ramapithecus**, followed by **Australopithecus**, **Homo habilis**, **Homo erectus**, **Homo neanderthalensis**, **Cro-Magnon man**, and finally **Homo sapiens**, or modern humans.

The most notable transformations in the course of human evolution from ape-like ancestors include the adoption of an erect posture and habitual bipedal locomotion, a significant increase in cranial capacity accompanied by enhanced intelligence, and the expansion and vertical rise of the forehead. Other important changes include the development of stereoscopic vision, reduction in the size of the external ear (pinna), formation of a distinct chin, greater flexibility of the neck allowing wider visual range, reduction of body hair, and the appearance of spinal curves supporting upright posture. Additionally, humans experienced an increase in overall height and evolved a reproductive pattern characterized by the absence of a fixed breeding season and continuous formation of gametes in the

2.5 GLOSSARY

Neo-lamarckism: The Lamarck theory of the inheritance of acquired character was revived with the support some evidences known as Neo-lamarckism.

2.6 EXAMINATION ORIENTED QUESTIONS

- Q1. Explain the Lamarck theory.
- Q2. Explore the characteristics of Homo Neanderthalensis of human ancestral form.
- Q3. Examine the evolution of modern man.

2.7 LESSON END EXERCISES

- Q1. Examine the important theories of evolution of life.
- Q2. Explain the important characteristics of human ancestral form.

2.8 ANSWER KEY

CYP-I

Q1. Refer sub-section 2.2.2

Q2. Refer sub-section 2.2.3

CYP-II

Q1. Refer sub-section 2.3.1

Q2. Refer sub-section 2.3.3

2.9 SUGGESTED READINGS

- *The Origin of Species* – **Charles Darwin**
- *Understanding Evolution of Man: An Introduction to Palaeoanthropology* - **P.K. Seth**
- . *The Descent of Man* – **Charles Darwin**
- *Our Human Story: Where We Come From and How We Evolved* – **Chris Stringer & Louise Humphrey** *Before the Dawn: Recovering the Lost History of Our Ancestors”* – *Nicholas Wade*
- **The Story of the Human Body: Evolution, Health, and Disease”** – *Daniel E. Lieberman*
- **Human Evolution: A Very Short Introduction”** - *Bernard Wood*

EARLY HUMAN SOCIETIES

Semester-I

Unit-I

Course No. HIST104

Lesson 3

PALEOLITHIC CULTURE

3.0 Learning Objectives and Outcomes

3.1 Introduction

3.2 Paleolithic Culture

3.2.1 Paleolithic Culture: Meaning

3.2.2 Paleolithic Culture: Tools

3.3 Paleolithic Culture: Sub Divisions

3.3.1 Lower Paleolithic Culture

3.3.2 Middle Paleolithic Culture

3.3.3 Upper Paleolithic Culture

3.4 Let us sum up

3.5 Glossary

3.6 Examination Oriented Questions

3.7 Lesson End Exercises

3.8 Answer Key

3.9 Suggested Readings

3.0 LEARNING OBJECTIVES AND OUTCOMES

Learning Objectives

The objective of this lesson is to enable you to:

- explain the Paleolithic culture.
- evaluate the meaning of the word Palaeolithic.

- Examine the tools associated to this period.
- Identify the economy and subsistence pattern of the people.

Learning Outcomes

After going through the lesson, you will have a clear understanding about:

- the meaning of Palaeolithic culture.
- the economy and subsistence pattern of the Palaeolithic society .
- the different tools used by the people during Palaeolithic Age.
- the different subdivisions of the Palaeolithic Age.

3.1 INTRODUCTION

Dear learners, in the previous two lessons you understood about the formation of earth and human evolution. Now, you will come across the cultural development of human. Paleolithic culture represents the earliest and longest phase of human cultural development. It is marked with the beginning of interaction between human and the natural environment through tool-making and subsistence activities. The word *Palaeolithic* is derived from the Greek words *palaaios* which means ‘old’ and *lithos* means ‘stone’. It refers to the use of rudimentary stone tools by early humans.

This Age is characterized by a hunting-gathering economy, nomadic lifestyle and dependence on natural resources. Early humans lived in small groups and adapted to diverse ecological conditions. Technological innovation during this period is reflected in the gradual refinement of stone tools, evolving from simple core and flake implements to more specialized and standardized tool types. The use of fire, development of language and social organization, and emergence of symbolic behavior further distinguish this phase of human history.

Archaeological evidence from stone tools, fossil remains, cave dwellings, and rock art provides valuable insights into the cultural, social, and economic life of Palaeolithic communities. The study of Palaeolithic culture is therefore crucial for understanding the biological and cultural evolution of humans, as it lays the foundation for later developments such as agriculture, permanent settlements, and complex societies.

3.2 PALEOLITHIC CULTURE

The earliest period of human cultural development i.e. Paleolithic Culture or Old Stone Age covers the time frame from approximately 2.5 million years ago to 10,000 years BCE. The most significant cultural development during this era was the development of stone tools. The method of survival for people during the paleolithic period was hunting animals and gathering wild plants. People resided in caves, rock overhangs, or temporary huts constructed from natural materials. The paleolithic period demonstrates early forms of human adaptation, innovation, and survival under difficult living conditions.

3.2.1 Paleolithic Culture: Meaning

The term Palaeolithic was coined by archaeologist John Lubbock in 1865. It refers to the period of prehistory from around 2.5 million years ago when human began to make stone tools. On the basis of tools used by the people, social and economic activities, and pattern of habitation the Palaeolithic culture may be divided into three periods: (i) Lower Palaeolithic culture, (ii) Middle Palaeolithic culture, and (iii) Upper Palaeolithic culture.

According to Brian Fagan, there are four criteria to define a human:- (i) the brain size should be more than 600 cubic centimeters, (ii) possession of language, (iii) precision grip and opposable thumb, and (iv) ability to manufacture tools. But, it is mystery that who were the first tool makers or the 'human'. *Australopithecus garhi* is identified as the first tool makers because the animal bones found nearby their fossils had cut marks from stone tools. They indicates the time period of around 2.5 million years ago.

3.2.2 Paleolithic Culture: Tools

The Palaeolithic Age, or Old Stone Age, represents the earliest and longest phase of human cultural development. A defining feature of Palaeolithic culture is the manufacture and use of stone tools, which reflect the technological abilities, cognitive growth, and adaptive strategies of early humans. Palaeolithic tools were not merely instruments for survival; they were expressions of human ingenuity in response to environmental challenges. Palaeolithic tools evolved from simple stone flakes to complex, specialized implements made of stone, bone, and ivory. This technological journey mirrors the intellectual and cultural evolution of early humans. The tools enabled humans to survive harsh climates, exploit diverse resources, and gradually dominate their environments.

Nature and Importance of Palaeolithic Tools

Palaeolithic tools were primarily made from stone. Bone, antler, and wood were also used for the manufacturing of the tools in this age, especially in later stages. Stone was preferred because it fractured predictably and could be shaped into sharp edges. Tool-making involved striking a core stone with another stone i.e. hammer stone to produce flakes or to shape the core itself. These tools served multiple purposes: hunting, cutting meat, scraping hides, woodworking, digging roots, and defense. The progressive refinement of tools demonstrates the evolution of human intelligence, planning ability, and motor skills.

Phases of Tool Development

1. **Lower Palaeolithic Tools:** The earliest tools belong to the Oldowan tradition. These were simple core and flake tools. A stone was struck to remove flakes, producing sharp edges suitable for cutting. The tools were crude but effective. Typical Oldowan tools include: Choppers, Hammer stones, and Simple flakes. Later, the Acheulean tradition emerged, associated mainly with *Homo erectus*. Acheulean tools show greater symmetry and planning. The most characteristic tool is the hand-axe, which is – Bifacially worked, Almond or pear-shaped, and Sharp along the edges. Other Acheulean tools include cleavers and picks. These tools indicate a significant improvement in craftsmanship and standardization, suggesting the ability to visualize the final form before shaping the stone.

2. **Middle Palaeolithic Tools:** Middle Palaeolithic tools are associated with Neanderthals and early modern humans. The dominant technique was the prepared core technique, especially the Levallois method. In this method, the core was carefully prepared so that flakes of predetermined shape could be struck off. Important tool types include – Scrapers, Points, Borers, and Notched tools. These tools were smaller, sharper, and more specialized than earlier ones. They were often retouched along the edges to improve efficiency. The Middle Palaeolithic tool tradition is known in Europe as the Mousterian industry. The tools show greater planning, economy of material, and functional specialization. They were prominently used for hunting, skinning animals, and preparing hides.
3. **Upper Palaeolithic Tools:** The Upper Palaeolithic marks a technological revolution. Tool-making became highly specialized, and new materials such as bone, ivory, and antler were widely used. The main innovation was the blade technique, where long, narrow flakes were struck from prepared cores. Important tools include – Blades and bladelets, Burins (engraving tools), End scrapers, Awls and needles, Harpoons and spear points. Bone needles with eyes indicate the making of stitched clothing, essential for survival in cold climates. Harpoons suggest fishing and water-based hunting. Composite tools, where stone blades were fixed into wooden or bone handles, became common. Upper Palaeolithic tools reflect not only technological efficiency but also aesthetic sense and craftsmanship.

Tool-Making Techniques: Three major techniques were used:

- (i) Direct percussion – striking stone with a hammer stone.
- (ii) Indirect percussion – using an intermediate tool for controlled flaking.
- (iii) Pressure flaking – applying pressure to detach small flakes for fine shaping.

Cultural Significance of Tools: Palaeolithic tools are more than archaeological objects; they represent the foundation of human culture. They show:

- (i) Cognitive development and problem-solving ability
- (ii) Transmission of knowledge across generations
- (iii) Adaptation to diverse environments
- (iv) Cooperation in hunting and food sharing

Check Your Progress CYP-I

Based on the understanding of the previous section, answer these questions in your own words:

Q1. Describe the nature and importance of the Palaeolithic tools.

Q2. Write a short note on the cultural significance of the Palaeolithic tools.

3.3 PALEOLITHIC CULTURE: SUB DIVISIONS

The Paleolithic Age, also known as the Old Stone Age, is the earliest phase of human history. It is commonly divided into three main sub-divisions: Lower, Middle, and Upper Paleolithic, based on technological and cultural developments.

3.3.1 Lower Paleolithic Culture

The Lower Palaeolithic culture represents the earliest phase of human prehistory. It marks the beginning of systematic stone tool production and use. It is dates from about **2.6 million years ago to around 300,000 years ago**, coinciding with the early part of the Pleistocene epoch. This period is crucial for understanding human biological evolution, technological innovation, and early cultural behavior. The Lower Palaeolithic is mainly associated with early hominins such as **Homo habilis**, **Homo erectus**, and later forms of **archaic Homo sapiens**. These hominins were anatomically and cognitively different from modern humans but demonstrated significant adaptive abilities. They gradually evolved larger brains, upright posture, and improved manual dexterity, which enabled them to manufacture tools and exploit diverse environments.

On the basis of manufacturing technique the tools of the Lower Palaeolithic Age are classified :-

- (i) **Oldowan tool technology**:- This name was given as they were found at Olduvai Gorge in Tanzania. They are Chopper-chopping tools. Percussion method was used to manufacture it (i.e. striking one object to another). *Homo habilis* are found associated with these tools.
- (ii) **Levallois tool technique**:- *Homo habilis* are considered to be associated with this involved more complex processes of tool making. The tools discovered from Koobi Fora near Lake Turkana in Northern Kenya are pebble-tools
- (iii) **Acheulian tool technology**:- *Homo Erectus* are called to be associated with this kind of tool. It is named after the site name where they were found Saint Acheul in France. They are bifacial tools. e.g. tools like hand-axe and cleavers.

Economy and Subsistence pattern: Lower Palaeolithic humans lived as **hunter-gatherers**. Their subsistence

depended on hunting animals, scavenging carcasses, and collecting wild plants, fruits, roots, and nuts. Evidence suggests cooperative hunting and food sharing within small groups. The use of stone tool allowed early humans to access high-protein diets, especially meat, which contributed to brain development. The controlled use of **fire**, though debated in its earliest stages, became increasingly important during this period. Fire provided warmth, protection from predators, cooking of food, and a social focus for group life.

Life style and settlement Pattern: Lower Palaeolithic communities were **nomadic**, moving frequently in search of food and water. Temporary camps were established near rivers, lakes, and raw material sources for stone tools. Shelters were simple, possibly using natural caves, rock overhangs, or open-air camps. Social organization was based on small bands with cooperation in hunting, tool-making, and child-rearing. Communication was likely limited but developing, laying the foundation for later complex language. Although artistic expression and symbolic behavior are not clearly evident in the Lower Palaeolithic, the period marks the beginning of human culture in its most basic form. The ability to plan, shape tools, control fire, and adapt to varied environments demonstrates the emergence of cultural behavior distinct from that of other animals.

3.3.2 Middle Paleolithic Culture

The Middle Palaeolithic culture represents a crucial transitional phase in human prehistory, roughly dated from **about 250,000 to 40,000 years ago**, though regional variations exist. It occupies a significant position between the Lower Palaeolithic and Upper Palaeolithic Age. This Age reflects major advances in technology, cognition, and social behaviour. This period is considered to be associated with **Neanderthals in Europe and West Asia** and with the **early Homo sapiens in Africa and parts of Asia**.

Tool Technology: Classification of the tools of Middle Palaeolithic period was done on the basis of new tools found i.e. Mousterian tools. It is named after the site where they are found i.e. Le Moustier in southwest France. Mousterian tools were made by using following two prominent techniques:-

- (i) Levallois technique:- This is a reducing method used for knapping to produce large flakes, oval in shape with acute angled, sharp usable edges. This method is used to predetermine the shape of the end product before removal of the stone from the core.
- (ii) Disk core:- The flat disc is used for manufacturing points and scrapers. The Neanderthals are considered to be associated with it.

The Middle Palaeolithic society was advanced themselves in terms of better tools, complex hunting strategies, social organizations and environmental adaptive strategies. The time period of this age is identified around 40,000 years ago. It is associated with the first fully evolved human species – Cro-Magnons named after a rock shelter found at Les Eyzies in south western France.

Subsistence and Economy: Middle Palaeolithic communities followed a **hunter-gatherer economy**, but with more systematic and cooperative hunting strategies than earlier periods. Evidence suggests group hunting of large animals such as bison, deer, and mammoths in some regions. Plant foods, roots, fruits, and nuts also formed an important part of the diet. Fire was widely used for cooking, warmth, and protection, which improved nutrition

and survival in cold environments. Temporary camps near rivers, caves, and rock shelters indicate seasonal movement and planned resource exploitation.

Social Organization: It is found that the complexity in the social life during this period had increased. Small bands lived cooperatively, sharing food and responsibilities. Archaeological evidence from burial sites suggests care for the elderly and injured, pointing to the emergence of **social compassion and group responsibility**. **Intentional burial of the dead**, especially among Neanderthals is considered as one of the most important development. Some burials show signs of ritual behaviour, such as placement of tools or flowers, suggesting early religious or symbolic thinking.

Art and Symbolism: Although artistic expression was limited compared to the Upper Palaeolithic, there is growing evidence of symbolic behaviour. Use of ochre pigments, perforated shells, and simple ornaments indicates an emerging sense of identity, aesthetics, and possibly communication through symbols.

3.3.3 Upper Paleolithic Culture

The Upper Palaeolithic marks the final and most culturally dynamic phase of the Old Stone Age. This period is marked with the anatomically modern humans i.e. *Homo sapiens* characterized by remarkable advancement in technology, art, social organization, and symbolic behavior. This period represents a crucial stage in the development of human culture and creativity.

Tool Technology: The tool technique used during the Upper Palaeolithic Age was called the Blade technology. These are sharp long parallel side blanks are considered to be used to produce a wide spectrum of artifacts for a range of activities. Bones, stones and ivory were used in general for manufacturing of these tools. Hunting and gathering was the prime economic activities which included fishing. They improved their tools and also made advancement in their social and religious life. It is found that the Cro-Magnons migrated towards the river valley.

Upper Palaeolithic technology shows a clear departure from earlier core-based tools. The dominant feature was the **blade industry**, in which long, thin flakes were struck from prepared cores and then modified into specialized tools such as burins, scrapers, knives, and points. Tools were also made from **bone, antler, and ivory**, indicating a diversified use of raw materials. Composite tools—where stone blades were fixed onto wooden or bone handles—suggest sophisticated planning and craftsmanship. This technological improvement increased efficiency in hunting, food processing, and clothing manufacture. Needles with eyes, for example, indicate the stitching of animal skins into fitted garments, essential for survival in cold climates.

Economy and Subsistence Pattern: The Upper Palaeolithic economic activities were based on **hunting, fishing, and gathering**, but with more systematic strategies than before. Large game animals such as mammoths, reindeer, bison, and horses were hunted using spears, spear-throwers (atlatls), and traps. Seasonal movement patterns show that humans carefully planned their migrations according to animal herds and resource availability. Food storage and better cooking techniques improved nutrition, contributing to population growth and greater social stability.

Society: Upper Palaeolithic communities lived in **small, cooperative bands**. Evidence of shared habitation

sites, hearths, and tool-making areas suggests organized social life. The presence of care for the elderly and injured implies empathy and social responsibility. Group identity may have been strengthened through rituals, art, and shared traditions. Trade networks also appear, as exotic stones and shells are found far from their natural sources, indicating long-distance exchange and communication.

One of the most striking features of Upper Palaeolithic culture is the emergence of **art and symbolism**. Cave paintings from sites such as Lascaux and Altamira depict animals, hunting scenes, and abstract symbols with great skill. Portable art objects, including figurines like the “Venus” statues, carved bones, and decorated tools, reflect aesthetic sensibility and possibly religious or fertility beliefs. These artistic expressions demonstrate advanced cognitive abilities, imagination, and symbolic thinking—hallmarks of modern human culture.

Burial practices with grave goods, such as tools, ornaments, and ochre suggest belief in the concept of life after death or contain spiritual beliefs. The use of red ochre as grave good may symbolize blood, life, or rebirth. Such rituals indicate that Upper Palaeolithic humans had developed complex belief systems and emotional depth.

CYP-II

Based on the understanding of the previous section, answer these questions in your own words:

Q1. Describe the life style and settlement pattern of Lower Palaeolithic Age.

Q2. Write a short note on the tool technique of Middle Palaeolithic Age.

3.4 LET US SUM UP

The Palaeolithic culture, also known as the Old Stone Age, represents the earliest and longest phase of human cultural development. It began around **2.6 million years ago** and continued until about **10,000 BCE**, when climatic changes and the development of agriculture led to the Neolithic period. This phase is marked by the evolution of early humans and their adaptation to natural environments through simple technologies and social practices. People of the Palaeolithic age were **hunters and gatherers** who depended on wild animals, plants, fruits, and roots for survival. They lived a **nomadic life**, moving from place to place in search of food and shelter.

Natural shelters such as caves, rock shelters, and open camps near rivers and forests were commonly used. The most distinctive feature of Palaeolithic culture was the use of **stone tools**. These tools were primarily made by chipping stones like flint and quartz. The period is generally divided into **Lower, Middle, and Upper Palaeolithic**, each showing gradual improvement in tool-making techniques—from simple hand axes to finely crafted blades and bone tools.

Social organization during this period was simple and based on small groups or bands. The discovery of **fire** was a major achievement, as it provided warmth, protection, and the ability to cook food. Toward the Upper Palaeolithic phase, evidence of **artistic expression** such as cave paintings, carvings, and burial practices suggests the development of symbolic thinking and early religious beliefs.

In essence, the Palaeolithic culture laid the **foundation of human civilization** by shaping early technological skills, social cooperation, and adaptation to the environment, paving the way for later cultural and economic developments.

3.5 GLOSSARY

Acheulean: A Lower Palaeolithic stone tool technique characterized by large bifacial tools such as hand axes and cleavers, associated mainly with *Homo erectus*.

Blade: A long, narrow stone flake with parallel sides, commonly associated with Upper Palaeolithic tool industries.

Chopper: A simple stone tool made by flaking one side of a pebble, commonly found in Lower Palaeolithic contexts.

Cleaver: A large cutting tool with a broad straight edge, typical of Acheulean industries.

Cognitive Evolution: The development of human mental abilities such as planning, symbolic thinking, and language during the Palaeolithic period.

3.6 EXAMINATION ORIENTED QUESTIONS

- Q1. Explain the social aspects of the people during Palaeolithic Age.
- Q2. Describe the subsistence pattern in Palaeolithic Age.
- Q3. Examine the tool technique of Paleolithic Culture.

3.7 LESSON END EXERCISES

- Q1. Explain the tool technique of Palaeolithic Culture.
- Q2. Describe different classification of Palaeolithic Culture Age.

3.8 ANSWER KEY

Check Your Progress (CYP)–I

Q1. Refer sub-section 3.2.2

Q2. Refer sub-section 3.2.2

CYP–II

Q1. Refer sub-section 3.3.1

Q2. Refer sub-section 3.3.2

3.9 SUGGESTED READINGS

- **Grahame Clark** – *World Prehistory: A New Outline*
- **Brian M. Fagan** – *People of the Earth: An Introduction to World Prehistory*
- **Gordon Childe** – *What Happened in History***Renfrew, Colin & Paul Bahn** – *Archaeology: Theories, Methods and Practice*

EARLY HUMAN SOCIETIES

SEMESTER-I

UNIT-I

COURSE NO. HIST104

LESSON 4

MESOLITHIC CULTURE

4.0 Learning Objectives and Outcomes

4.1 Introduction

4.2 Mesolithic Culture

4.2.1 Mesolithic Culture: Meaning

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4.2.3 Economy and Society

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4.4 Let us sum up

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4.6 Self-Assessment Questions/ Examination Oriented Questions

4.7 Lesson End Exercises

4.8 Answer Key

4.9 Suggested Readings

4.0 LEARNING OBJECTIVES AND OUTCOMES

Learning Objectives

The objective of this lesson is to enable you to:

- explain the Mesolithic culture.
- evaluate the meaning of the word Mesolithic.
- Examine the tools associated to this period.
- Identify the economy and subsistence pattern of the people.

Learning Outcomes

After going through the lesson, you will have a clear understanding about:

- the meaning of Mesolithic culture.
- the economy and subsistence pattern of the Mesolithic society.
- the different tools used by the people during Mesolithic Age.
- the Expansion of Mesolithic culture in different part of the earth.

4.1 INTRODUCTION

Dear learners, the previous lesson talked about the Paleolithic culture and tools. Now, you will learn about the Mesolithic culture is a time in history when people started to change the way they lived. This was between the Neolithic periods. The Mesolithic culture time is usually around 10,000 years before our time to 6,000 years before our time.. This is different in different places because of the environment and how people lived.

The Mesolithic culture happened when the big Ice Age was ending and a new time called the Holocene epoch was starting. The weather was changing a lot. This had a big effect on peoples lives and how they got food. The Mesolithic culture was a time for human cultural evolution. The Mesolithic culture saw people adapting to these changes, in the environment.

Mesolithic communities were mainly people who hunted and gathered food. They were different from the people who came before them the Palaeolithic people. The Mesolithic communities did things in a varied way and they were better at finding food. When the weather started getting warmer forests and grasslands began to grow and lakes and rivers got bigger. This meant that the Mesolithic communities could use a lot of things for food like little animals, fish, birds and plants that grew in the wild. They started to fish and hunt birds and animals at times of the year. Fishing and hunting at the time of the year became very important for the Mesolithic communities to survive. They were getting better at living in their area and using what they had. The Mesolithic communities were good, at finding food in their way.

The thing that really stands out about culture is that people used a lot of microlithic tools. These microlithic tools are small and really well made from flint or chert. People would usually attach these tools to handles made of wood or bone to make tools like arrows, spears and sickles. This shows that people were getting better, at making tools and hunting. The bow and arrow was used a lot more which made hunting a lot easier. Mesolithic culture really made use of microlithic tools to improve how they hunted.

When you look at Mesolithic societies in a way you can see that they started to live in one place for a little while. They set up camps near rivers, lakes and the coast. You can tell they were getting more settled because they built huts dug storage pits and made living spaces that were organized. This is a change, from how people lived before. Mesolithic societies also started to make art like the pictures they drew on rocks. They even started to bury their dead in a way, which shows that they were thinking about things in a more symbolic way. Mesolithic societies were really getting into expressing themselves through art. For example, the way they buried their dead.

In essence, the Mesolithic period marks a crucial stage in human history, characterized by environmental adaptation, technological innovation, and gradual cultural complexity. It laid the foundation for the emergence of agriculture, permanent settlements, and complex societies in the Neolithic age.

4.2 MESOLITHIC CULTURE

The Mesolithic culture, also known as the Middle Stone Age, represents a transitional phase between the Paleolithic (Old Stone Age) and Neolithic (New Stone Age). It roughly dates from about 10,000 BCE to 6000 BCE, though the timeline varies across regions. This period emerged after the end of the last Ice Age, when climatic conditions became warmer and more stable, encouraging new ways of life. A key feature of Mesolithic culture was the use of **microliths** – small and finely made stone tools that were often fitted into wooden or bone handles facilitating hunting more efficient. Alongside hunting, fishing and gathering became important, especially in areas near rivers, lakes, and coastal regions. Mesolithic people were primarily **semi-nomadic**, living in temporary or seasonal camps rather than permanent settlements. However, there is evidence of habitation patterns and early signs of domestication. Art and culture also developed during this time, with rock paintings depicting hunting scenes and daily life. Social organization became more complex, with small groups forming cooperative communities. People of this period reflect human adaptability and innovation, bridging the gap between primitive hunting societies and early agricultural civilizations.

4.2.1 Mesolithic Culture: Meaning

The word Mesolithic comes from the Greek word *mesos* means middle. The word *lithos* means stone. So Mesolithic literally means the Middle Stone Age. This period is like a bridge, between the Palaeolithic and the Neolithic. The Mesolithic period is a part of how humans changed over time. During the period people had to adapt to the environment after the Ice Age. They also changed how they got food and what tools they used. In this period people started living in kinds of settlements. The Mesolithic period is very important because it shows how people lived during the Middle Stone Age.

The Mesolithic is considered as prelude to the Neolithic and indicates the culture of people between Palaeolithic and Neolithic, identified with:-

- (i) Climate changes indicates the of Palaeolithic
- (ii) Beginning of new small tools i.e. microlithics
- (iii) Introduction of bow and arrows changed the hunting strategies.

This period started around 10,000 years before our time and ended around 6,000 years before our time. The exact time is different in different parts of the world. In Europe the Mesolithic period began when the last Ice Age was over. The Mesolithic period in the subcontinent went on for a long time it even continued in some areas until people started writing history. This period experienced the end of Ice age and starting of the warmer period and then again a colder phase thereafter. During the warmer phase estuaries, coasts and lakes became highly resourceful and productive due to increase in sea level. The availability of food resources increased the population and intern directed to two kinds of changes: - (i) change pattern of tool use and (ii) change in the utilization pattern of available food resources.

The Mesolithic culture was a time period when people had to adapt to changes in the weather the melting of big ice sheets and the growth of new forests and grasslands. This was also a time when new animals started to appear. The Mesolithic period was a deal, for the Mesolithic culture because it was a time of big change. The Mesolithic culture had to respond to all these changes in order to survive.

When we think about what Mesolithic culture means it is a time when people were getting used to things and trying them out. Mesolithic culture was not a change but more like a phase of adaptation. People still did things like hunting, fishing and gathering food. They started to get better at specific things. Mesolithic communities did not just hunt animals like they did in the Upper Palaeolithic. Instead Mesolithic culture was about using different kinds of food like small animals, birds, fish, shellfish and plants that grow in the wild. This way of finding food shows that people in Mesolithic culture knew more about the earth and how to live with it. Mesolithic culture was really, about people learning to live with their environment and using different things to survive.

The Mesolithic culture is known for making tools called microlithic tools. These tools are made from pieces of stone. People made these tools from very small blades and flakes of stone. They were very good at making these tools. The people of the Mesolithic culture used these tools to make other tools like arrows and spears and sickles. They attached the tools to wooden or bone handles. The Mesolithic culture peoples used a number of tools because they were very useful. These tools were small and easy to carry around. The people of the Mesolithic culture could use these tools in different places and, for many different activities.

4.2.2 Mesolithic Culture: Tools

The Mesolithic period, also known as the Middle Stone Age, marks a transition between the Palaeolithic and Neolithic cultures. It roughly dates from around 10,000 BCE to 6,000 BCE, although the specific dates differ by region. One of the key characteristics of Mesolithic culture is its tool technology, which shows notable innovation, refinement, and adjustment to changing environmental conditions after the last Ice Age. A defining feature of Mesolithic tool collections is the widespread use of microliths. Microliths are small, finely crafted stone tools, usually less than 5cm long. They were typically made from materials like flint, quartz, chert, and chalcedony. These tools were created using advanced flaking techniques, including pressure flaking, which offered greater precision and control compared to earlier Palaeolithic methods. Microliths often took geometric shapes, like triangles, trapezes, crescents, and points, as well as non-geometric forms such as blades and flakes. A significant advancement of the Mesolithic period was the use of composite tools. Rather than relying on a single large stone

tool, Mesolithic people attached microliths to wooden or bone shafts with resin, gum, or sinew. This led to more effective tools like arrows, spears, harpoons, and sickles. The invention of the bow and arrow is one of the most important advancements in Mesolithic tool technology. It greatly improved hunting efficiency and allowed for hunting of smaller and faster game. Mesolithic toolkits also included scrapers, burins, awls, and borers. These tools were used for processing animal hides, woodworking, and bone working. They show a diversification of economic activities, including fishing, hunting, and gathering. Tools made from bone and antler became more common during this time. Fish hooks, harpoons, and needles made from bone highlight the increasing importance of fishing and aquatic resources, especially in coastal and river areas. Grinding and pounding tools, such as querns, hammerstones, and pestles, also appeared in Mesolithic settings. These tools suggest that people processed wild plant foods, including nuts, seeds, and tubers, indicating a broad subsistence strategy. Although agriculture had not yet started, these tools hint at developments that would come later in the Neolithic. Regionally, Mesolithic tool traditions show significant variation. In India, Mesolithic tools are well documented at sites like Bagor, Langhnaj, Adamgarh, and Bhimbetka, where microlithic industries are prevalent. Indian Mesolithic collections often contain bladelets, points, lunates, and trapezes, reflecting hunting and gathering activities. In summary, Mesolithic tools show a high level of technological innovation, adaptability, and specialization. The focus on microlithic and composite tools allowed Mesolithic communities to efficiently use diverse ecological niches. These advances played a crucial role in connecting the mobile hunter-gatherer societies of the Palaeolithic with the more settled, food-producing societies of the Neolithic period.

4.2.3 Economy and Society

Subsistence Pattern: Mesolithic people practiced a subsistence mode of broad-spectrum resource use. In contrast to the specialized hunting of large game in the Upper Palaeolithic, Mesolithic people used many different kinds of food including: small animals; birds; fish; shellfish; and plant foods (e.g., fruits, nuts, roots). Mesolithic Climatic Changes occurred during the Holocene due to the climatic warming which resulted in increasing diversity of available ecological systems such as forests, grasslands, and wetlands.

Hunting still played an important role, but now more for small (e.g., deer, wild pig, goat) and medium-sized (e.g., antelopes) animals. Microlith tools (e.g., arrowheads) in conjunction with wood and bone shafts enhanced the efficacy of hunting. Fishing became an important subsistence activity as demonstrated by the presence of fishhooks, harpoons, fish nets, and shell middens at many Mesolithic habitation sites. Riverine, coastal, and lacustrine habitats were increasingly exploited. Gathering comprised a substantial portion of the subsistence mode. The collection of wild edible plant foods in a seasonal manner shows extensive knowledge of species in an ecological system. In addition, there is evidence that Mesolithic people were practising some basic food management techniques such as selecting for the best species to collect and possibly storing excess food for future consumption, suggesting some early stages of planning the economy. However, there is no evidence that Mesolithic people used systematic agriculture and/or domesticated animals.

People & Society: The increasing complexity of societies after the Mesolithic (the period between the Paleolithic and the Neolithic) did not mean that these societies were not egalitarian, but rather that they have developed

certain characteristics that demonstrate the greater complexity of Mesolithic societies compared to Paleolithic ones. For example, the Mesolithic period saw the establishment of more permanent or semi-permanent (seasonal) settlement patterns in areas that were resource-rich. In turn, larger population sizes and increased complexity in social relations arose due to sedentary lifestyles. Many of the Mesolithic people's social relationships were probably better defined by the use of physical space (through the use of living areas, storage pits, or otherwise). It is likely that the Mesolithic people also had different traditional practices and customs based on a demographic division of labor (age/sex). This division of labor would have included hunting and fishing, as well as the manufacture of tools and gathering.

Evidence from burials in the form of grave goods (like tools, jewelry, or ochre) and symbolic practices is indicative of social differentiation and ritual practices during the Mesolithic. Some examples of what we can find buried with people, along with signs of cultural expression and belief systems, are things such as beads, ornaments, pendants, and rock art, among others.

If there was leadership within the Mesolithic social structure, it was probably informal and situational, based on experience, skill, or resource availability rather than any established institutional authority. Social bonds were established and maintained through kinship relationships, or by cooperating within subsistence activities, and by performing similar rituals.

4.2.3 Debate on Shifting to the River Valley

Lewis R. Binford states that people settled by river valleys in the Mesolithic period because they were able to obtain large amounts of fish from these rivers. The river provided fresh water and an ability to settle and produce food for growing populations, but W. Creighton Gabel believes this settlement was due to population growth in the area and thus food shortages occurred, forcing them to fish as a last option. Fishing as an activity was labor-intensive and did not provide as much nutrition as other land-based food sources. Another researcher, David Yesner, has a different viewpoint than those mentioned above, stating that shifting to aquatic resources was the best choice for early humans because of changes in their environment, increased demands from their population, and food shortages.

CYP–I

Based on the understanding of the previous section, answer these questions in your own words:

Q1. Describe the different tools associated with Mesolithic culture.

Q2. Write a short note on the subsistent pattern and social complexity of Mesolithic culture.

4.3 MESOLITHIC CULTURE: GEOGRAPHICAL EXPANSION

The Mesolithic period span represents a huge geographical expansion of humans as they adapted to new environmental and climatic conditions. This geographical expansion can be traced in Europe, Africa and Asia as well as communities adapted to their environment.

4.3.1 Europe: The Mesolithic culture in Europe has been identified with different cultures resulted due to variation in climatic changes, different tool cultures and newer pattern of food collection.

Western Europe:- The importance of shellfish during this period can be traced. Availability of trapezoidal microlith was noticed in large numbers. The Sauveterrian, Azilian, early Tardenoisean, Larnian, and Asturian were most prominent in this region.

Northern Europe:- During this period the Kitchen-Midden, Maglemosian, and Campignian were prominent in this region. It is characterized by the bows and arrows, use of canoes, domestication of dog and other sea going crafts with range of fishing tools such as nets, traps, hooks, etc. Tools such as celts, axes and projectiles also can be traced around 6000 BP and the melting ice of glacial raised the sea level leading to increase in aquatic resources.

4.3.2 Scandinavia and Britain

Permanent settlement and noticeable population pressure are its defining features. The mixed economy of the coastal settlements is built on the utilisation of both forest and marine resources. They had started producing pottery by the later era, which began around 4000 BP. The Maglemose, Kongemose, and Ertebolle periods are the three divisions of this Mesolithic society.

- (i) The Maglemosean culture, which began to take shape approximately 9500–7700 BP, was distinguished by communities living in river valleys and relying on a hunting and foraging economy. Summer lakeshore communities made up the majority of the locations. Numerous fish bones have been discovered, indicating a reliance on marine resources. The majority of the population resided in modest huts with prepared floors on occasion. For instance, cottages with wood flooring and bark have been discovered in Ulkestrup, Denmark.
- (ii) Kongemose Culture: Similar to Maglemose, it originated near riverbanks between 7700 and 6600 BP. Segebro, close to the northwest coast of Sweden, is the most notable location for this culture. The

arrowheads on this site are rhombic. This culture relied heavily on hunting for its economic sustenance.

- (iii) Ertebolle Culture: The Ertebolle culture supplanted Kongemose culture. Around 6600–5300 BP, it appeared with a sophisticated tool technology that included wood, bone, and antler tools. Hunting and fishing constituted the main sources of income. Axes, scrapers, trapezes, perforated antlers, and other implements are among the tools. Additionally, some cooking pans were discovered. There is proof that both inland and coastal locations are occupied year-round.

The body was buried in cemeteries and positioned in different ways. There are indications that a dog was buried with a human body. This demonstrates a rise in social and ritual complexity as well as some degree of social differentiation. There are cemeteries in Scania, Sweden's southernmost province, and Zealand, Denmark's largest island.

4.3.3 South-West Asia

The domestication of plants and animals in this area has been intriguing. It developed into the birthplace of food production. In this area, the Mesolithic period can be divided into three distinct stages. These include Natufian, Kebaran, and Mushabian cultures.

- (i) Mushabian Culture: It originated in the eastern Mediterranean region between 14,000 and 12,800 BP. Small geometric microliths are a defining feature of this culture.
- (ii) Kebaran culture: characterised by the removal of bladelets from the core, it arose between 13,500 and 1,500 BP. The bladelets were variously shaped microliths, ranging in size from 4 to 7 millimetres. The hunting and gathering economy was the main source of income. Pestles, mortars, and other ground stone tools—a characteristic of Neolithic culture—were discovered. Changes in vegetation and the environment occurred in this area by 13,000 BP.
- (iii) Natufian Culture: It originated in the Levant between 12,500–10,200 BP. It has provided proof of the emergence of agriculture. As a result, it is regarded as the time between the Mesolithic and Neolithic periods. Village settlements and a sedentary lifestyle were characteristics of this culture.

Microliths, burins, borers, scrapers, blades, knives, picks, and arrowheads were all used to identify the culture. In addition, stone jars and various grinding stone implements such as pounders, pestles, and querns were discovered. The significance of fish in this culture's human nutrition is demonstrated by the discovery of fish hooks and nets. Nonetheless, there is proof that the members of this culture hunted and collected animals including gazelles, deer, wild goats, and others.

According to their research, archaeologists Anna Belfer-Cohen and Ofer Bar-Yosef suggest that signs of sedentarism can be identified in the early Natufian culture, with numerous sites discovered throughout the Levant. They characterize it as a culturally intricate hunter-gatherer society that featured dwellings, underground storage facilities, burial sites, and flint, stone, and bone tools. The evidence indicates a difference between 'base camps' and 'seasonal camps.' The shift in settlement patterns from fully sedentary to semi-sedentary bases has led to significant changes in the Levant.

CYP-II

Based on the understanding of the previous section, answer these questions in your own words:

Q1. Discuss the geographical expansion of Mesolithic culture in Europe.

Q2. Write a short note on the Mesolithic culture in the South-West Asia.

4.4 LET US SUM UP

The Mesolithic culture, the transitional period between the Palaeolithic and Neolithic eras, is termed the ‘Middle Stone Age’ owing to a combination of Greek mythology (meso-meaning middle; lithos-meaning stone). The Mesolithic period, which began around 10,000BCE and lasted until 6,000BCE, varied in length from one region to another because its boundaries were determined by environmental conditions and cultural transformations. The rise of Mesolithic culture coincided with the end of the last Ice Age (the Pleistocene) and the development of the Holocene epoch. As the Earth warmed, glaciers retreated, sea levels rose, and forests and grasslands expanded, which drastically changed the environment. These alterations influenced how people obtained food, settled in communities, and manufactured tools. Those living in Mesolithic communities utilized an array of ecological habitats and exploited more diverse food sources than their Palaeolithic ancestors.

Microlithic micro-tools were an aspect of Mesolithic culture that set it apart from preceding cultural periods. Microliths were small, geometric-shaped stone tools, whose shapes included triangles, trapezoids, and crescents, that were made with precise workmanship and would typically be affixed to wooden or bone shafts to create composite implements such as spear tips, arrowheads, and sickles. The introduction of microlithic tools enhanced the productivity of the hunter-gatherers of this era.

4.5 GLOSSARY

Mesolithic: The middle phase of the Stone Age, placed between the Palaeolithic and Neolithic periods.

Microliths: Small, finely made stone tools, usually geometric in shape (triangles, trapezes, crescents), often

mounted on wooden or bone handles to make composite tools.

Composite Tools: Implements made by fixing microliths onto shafts of wood or bone, forming arrows, spears, and sickles.

Hunter-Gatherers: Communities that depended on hunting animals, fishing, and collecting wild plants rather than agriculture.

Seasonal Camps: Temporary habitations used by Mesolithic communities during particular seasons for hunting, fishing, or gathering.

Canoes: a narrow water rowing vessel.

Celts: long and thin tools made of stone

4.6 EXAMINATION ORIENTED QUESTIONS

- Q1. Explain the Mesolithic culture.
- Q2. Examine Subsistence pattern in Mesolithic culture.
- Q3. Describe the Mesolithic culture in South-West Asia.

4.7 LESSON END EXERCISES

- Q1. Examine the tool making practices in Mesolithic culture.
- Q2. Explain the Mesolithic culture in Europe.

4.8 ANSWER KEY

CYP-I

- Q1. Refer sub-section 4.2.2
- Q2. Refer sub-section 4.2.3

CYP-II

- Q1. Refer sub-section 4.3.1
- Q2. Refer sub-section 4.3.3

4.9 SUGGESTED READINGS

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EARLY HUMAN SOCIETIES

SEMESTER-I

COURSE NO. HIST104

UNIT-I

LESSON 5

ART AND RELIGION

5.0 Learning Objectives and Outcomes

5.1 Introduction

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5.6 Examination Oriented Questions

5.7 Lesson End Exercises

5.8 Answer Key

5.9 Suggested Readings

5.0 LEARNING OBJECTIVES AND OUTCOMES

Learning Objectives

The objective of this lesson is to enable you to:

- explain the art and religion of the early human.
- evaluate the art and religion of the early human.

- examine the different kind of art and.
- Identify the idea of religion practiced by them.

Learning Outcomes

After going through the lesson, you will have a clear understanding about:

- the meaning of art and religion during stone age.
- the different kind of stone art.
- the religion followed by the people during stone age.
- the different religious ideas of the period.

5.1 INTRODUCTION

Dear learners, till now, you have understood the subsistence pattern and tools used during the Stone Age. But, evidences show their religious believes also. The Stone Age is the first period of human history when humans lived as hunters and gatherers with stone tools. Humans of this period had simple lifestyle but they had the famous art forms and religious ideas which indicated their creativity and spirituality. The initial expressions reveal the emergence of culture, imagination, and symbolic thought.

Cave paintings, striking rock engravings, and small stone or bone carvings show the world Stone Age art clearly. In the Paleolithic period, painted animals, hunting scenes, and symbols appeared in caves like Lascaux (France) and Altamira (Spain). They also made tiny sculptures, including the Venus figurines, which are thought to symbolize fertility. Many historians suggest that these artworks were not created solely to beautify a dwelling, but also imparted magical properties to ensure success while hunting and protecting a community.

Religion among Stone Age people was closely connected to nature. Primitive men perceived animals, trees, rivers, the sun, and moon along with other things as possessed of the spirit. This belief system is called animism. They offered various rituals and ceremonies to these spirits in hopes for safety, food and good luck. The dead were buried with tools and food. Thus, this shows that people thought there was life after death.

5.2 ART AND RELIGION: INTRODUCTION

There is a strong connection between religion and art in the prehistoric period. At that time, people were trying to comprehend the world and find ways to control nature. However, due to the absence of writing system at that time, most pieces of information about religion and art are based on archaeological discoveries. Thus, cave paintings, carvings, and other ritual objects should be considered carefully. It is considered that the art and religion were inseparable during prehistoric period.

5.2.1 Home Art and Cave Art

Prehistoric art can be categorized into two types based on the materials utilized. They are as follows:

Home Art or Art Mobilier: - Art works created on movable materials is referred to as 'home art' or 'Art mobilier'. It encompasses personal decoration items featuring decorative engravings, including necklaces, pendants, pendants, lockets, arm bands, and more; female figurines; ivory representations of animals like horses, mammoths, reindeer, and cave bears; engraved horse ribs; along with carved antler tips.

Cave Art or Art Parietal: - Art created on the walls and ceilings of caves and rock shelters is referred to as "cave art" or "Art Parietal." Cave art consists of engravings and paintings found on the walls, ceilings, and floors of caves and rock overhangs. The art works available are in one colour i.e. monochrome and various colours i.e. polychrome such as red, black, and brown. Animals are typically depicted either individually or in groups of different sizes. The animals frequently depicted in "cave art" include bison, wild cattle, mammoths, reindeer, ibex, wild horses, and woolly rhinoceroses; other representations feature cave bears, wolves, felines, and human figures.

In addition to these depictions, numerous abstract symbols are presented in many of the major caves. They are referred to as tectiforms, claviforms, or blazons. Interpreting these signs is quite challenging, yet they seem to be efforts to convey certain messages. A collection of hand impressions has been discovered, including both positive prints and negative or stenciled impressions. Certain hand impressions display damaged fingers. Many scholars have interpreted manifestations of prehistoric art as: (i) It depicts the concerns related to the economic, religious, or magical practices of hunters. The animals depicted through engravings or painting on cave walls are those that provide their food supply. (ii) An alternative interpretation suggests that the cave art served as a way to exert some influence over the wild animals relied upon by prehistoric hunters. It demonstrates their skill in creating genuine portrayals of these animals, drawn from a lifetime of observing the conduct and behavior of their prey during hunts. (iii) Another alternative perspective which is put forth by Leroi-Gourhan and his supporters, suggests that the cave art focused on depicting the complementary aspects of male and female principles. The animals and symbols are categorized as male and female.

5.2.2 Sources of Knowledge

Knowledge sources concerning the prehistoric era are not found in written texts or oral traditions. Thus, the religious understanding of this time is indirect, as it relies on the evidence gathered from investigations conducted in various locations. To facilitate the study, these pieces of evidence are organized into four distinct categories:

- (i) **Material remains:** The material remains obtained through excavations are primarily outcomes of activities with either practical or non-practical goals. They offer insight into the lifestyle of those who created them. Actions with practical purposes, like creating fires, cooking meat, or crafting tools and weapons, can lead to social stratifications. Simultaneously, the use of personal ornaments such as pendants, shells, and beads might have enhanced an individual's attractiveness but they could also have been interpreted as representations of status and importance within society. They might have also been viewed as having religious importance. A gold cross serves as a representation of faith in contemporary Western culture.

The difference between 'practical' and 'non practical' actions in Upper Palaeolithic societies was likely not well-defined. The burials and grave goods are viewed as actions that transcend mere practicality.

The oldest indications of Upper Palaeolithic burial sites in the Middle East, with 'offerings' placed with the dead, date back to around 90,000 - 100,000 years ago at Skhul and Qafzeh. Burial practices with grave goods were rare among Neanderthals, but this became standard with the remains of *Homo sapiens sapiens*.

It was necessary to dispose the dead bodies but digging a grave, scattering it with red ochre (which might symbolise blood or life), depositing fine flint or ivory artifacts, reindeer antlers or the leg of an animal near a corpse or on top of it, are different matters altogether. They seem to testify to a belief that a dead person is, in some way or other, still valuable and needs not only 'respect' but also perhaps some kind of 'help' in the form of material goods. Many researchers argue that such practices make sense only if we surmise that the people thought that there was another world to which the dead went. For example; recently discovered Bruniquel arrangements of stalagmites and stalactites seem to make belief that the Upper Palaeolithic people had belief in a supernatural world to which the dead go.

When a tool or a weapon is beautifully carved with a representation of an animal in the form of portable art with non practical purposes then it may go far beyond a mere wish to add beauty. It might be used for the purpose to generate 'magical' power in the users.

- (ii) The artwork of caves and shelters: The carvings and visuals created by Upper Palaeolithic individuals discovered not only in the total darkness of deep caves but also in shelters and on cliff surfaces or boulders. The rituals and roles of these various locations might differ. It has been noted that generally identical representations of animals and geometric symbols were created using similar methods and conventions everywhere, with minor regional and temporal differences. Iron oxides served as the red pigment, while charcoal or manganese dioxide was used for the black. They employed their fingers as instruments to create pictures on the soft surfaces within the caves, while finer flint tools were utilized on the tougher surfaces of the walls and ceilings. To investigate the more profound caves, they utilized wooden torches and, subsequently, oil lamps with a wick.

Artists of the Upper Palaeolithic primarily illustrated animals and geometric 'symbols'. Among the animals present, the image-makers selected to depict the large herbivores they hunted, particularly horses, bison, aurochs, ibex, and various types of deer. Throughout all eras, birds and fish are infrequently highlighted. Certain animals are extremely uncommon, such as snakes, wolves, foxes, and bugs.

The sun, stars, and moon were never depicted, nor was the horizon line. No hills, no cabins, no scenic views, and hardly any identifiable symbols of tools, arms, or personal accessories. Typically, the images were created or carved with no clear connection to each other: clear 'scenes' are rare.

Evidently, Upper Palaeolithic art was not meant to portray a precise representation of the surroundings beyond the caves. Instead, it related to the convictions held by the creators of the images. The creators of images were engaging with particular types of interactions between chosen aspects of the material and supernatural realms and exploring how they could leverage powers arising from those interactions.

This conclusion leads us to what could be termed as faith-based convictions. It appears to be backed by the two distinct kinds of locations present in the caves. Paintings and engravings are occasionally found in tight, narrow spaces where only one individual can crawl. In this instance, the pictures were clearly not intended for wide audiences. In other instances, such as the Chamber of the Bulls in Lascaux or the Salon Noir in Niaux, the artworks were organized in large rooms in a truly impressive manner. In this case, it likely wasn't just the creation of the images that mattered; they appear to have aimed to captivate the audience. These two categories of underground sites are not separate entities: both may exist within the same cave.

- (iii) Activities of humans in caves: Archaeologists find that deep caves offer benefits compared to shelters and open-air locations. Footprints, handprints, and other markings offer important insights into Upper Palaeolithic visitors to the caves, including their quantities and ages. We therefore understand that very small children, one approximately six years old in Fontanet and a three-year-old in Tuc d'Audoubert, were brought into the deep caves. Footprints of a boy aged eight to ten from a significantly earlier era were recently discovered in Chauvet. A collection of remnants such as fire pits, hearths, torches, and bones from meals, alongside 'lost' tools, has been retrieved from their location, which are deemed to be purely related to 'practical' activities. Other artifacts like bear teeth or teeth from various animals, shells, flints, or antlers found in small hollows within the walls likely indicate ritual activities.
- (iv) Ethnography and analogy: Certain religious historians have tried to rebuild ur-religion through comparative approaches aimed at pinpointing the earliest elements of ethnographically documented faiths. They occasionally include what they perceive as universal human characteristics, like the urge to understand natural events.

Archaeologists, in contrast, have shown significantly less interest in pursuing these paths. Some have attempted to deduce religion explicitly from physical evidence; others have explored connections between physical evidence and particular, ethnographically documented rituals and beliefs. Every one of these methods, whether from religious historians or archaeologists, is filled with logical issues. Certainly, a great deal of pointless discussion stems from a disagreement on what qualifies as evidence and how explanations ought to be formulated. A clear methodology must be created and agreed upon before interdisciplinary discussions can hold significance.

Currently, all archaeologists concur that the *Homo sapiens sapiens* groups from 30,000 or 40,000 years ago were anatomically and physiologically identical to us. They possessed identical brains and nervous systems, sharing the same cognitive skills as we do. What transformed significantly over the millennia following the Upper Palaeolithic were their economic and social circumstances and their lifestyles.

However, in the Upper Palaeolithic, the population continued to be hunters and gatherers. Despite being contested by certain academics, it has long been recognized that to interpret the physical evidence of Upper Palaeolithic activities, we are far more likely to succeed by examining hunter-gatherer cultures rather than applying the reasoning of individuals in an industrialized Western society.

The initial European scholars did when they studied ‘primitive’ art for resemblances to the artwork found in the ancient caves and dwellings. However, if a geometric pattern found in a French cave resembles a hut in central Africa, it doesn’t automatically imply that the creator meant it to represent a hut. Nevertheless, certain universals exist in human thought processes, which can be utilized, cautiously, to analyze Palaeolithic evidence. For instance, globally, deep caves are regarded as the domain of spirits, the deceased, or deities, seen as a supernatural realm beneath our own, recognized as a perilous world to which very few - if any - can enter and then solely for specific reasons (Clottes and Lewis-Williams 1998; Lewis-Williams 2002).

Ethnographic analogy can illuminate the outcomes of individuals’ behaviors both in the deep caves they infrequently visited and in the shelters they inhabited. In the absence of these analogies, researchers inevitably rely on covert and deeply misleading comparisons to contemporary Western ideas and lifestyles. However, they must steer clear of a simplistic approach to ‘ethnographic snap’ and investigate various, not solely one or two, analogies grounded in universal connections between actions and evidence, which philosophers of science refer to as ‘strong relations of relevance’.

CYP-I

Based on the understanding of the previous section, answer these questions in your own words:

Q1. Write a short note on the cave art.

Q2. Describe material remains as a source of knowledge.

5.3 PREHISTORIC RELIGION

Prehistoric religion refers to the earliest forms of spiritual belief and practice among human societies before the invention of writing. Since there are no written records, our understanding comes from archaeological findings such as cave paintings, burial sites, tools, and ritual objects. These sources suggest that early humans had a deep sense of the supernatural and sought to explain natural forces beyond their control. It also reflects humanity’s early attempts to understand life, death, and nature through spiritual beliefs and symbolic practices.

5.3.1 Early Understandings of the Art and Religion

Art for art's sake: In the latter part of the nineteenth century, as the scientific community acknowledged 'prehistory,' and even more so after Charles Darwin released his evolutionary findings, scientists faced criticism from religious traditionalists. During this contentious period, anticlerical prehistorians, notably Gabriel de Mortillet, vehemently contested the notion that Upper Palaeolithic portable art – recently uncovered in caves in the Pyrenees and Dordogne – had any connection to religious feelings: 'The purpose of all these artworks was solely to embellish weapons, tools, and ornaments.' From this perspective, art was unnecessary and stemmed from a strong, inherent impulse in humanity to produce beautiful objects that were unrelated to any religious expression.

The theory known as 'art for art's sake' was discarded as a universal explanation for Palaeolithic art at the start of the twentieth century. In 1902, cave art – initially discovered in the Altamira cave (Spain) in 1879 – was finally acknowledged by the scientific community. It appeared evident that individuals would not have burrowed deep beneath the surface solely to create art pieces.

Sympathetic magic: The initial religious interpretation of the art was suggested at the dawn of the twentieth century. It gained immense prestige after Abbé Henri Breuil and his companion Count Henri Béguin established and promoted it. 'Hunting magic', as it was commonly referred to, was even sent overseas and utilized to analyze cultural arts and traditions in Africa and America. Essentially, hunting magic was a form of sympathetic or imitative magic grounded in a presumed connection between an image and the reality it depicted. By manipulating the image, one could exert control over the individual or animal it depicted. Imitative and contagious magic were ideas that Sir James Frazer brought into prominence near the close of the nineteenth century. Frazer posited that religion started from magic and would ultimately be replaced by science.

Embracing prevalent notions regarding 'primitive societies,' Breuil and Bégouën contended that when prehistoric 'sorcerers' entered the deep caves, it was not to produce stunning artistic creations in isolated locations that were seldom frequented. Instead, it served practical functions, aiding in the fundamental reality of their existence: primarily, to exert a type of influence over the creatures that supplied their essential nourishment. From that perspective, solely the creation of the drawing or the carving mattered. The depiction of an animal held intrinsic worth. Once it was achieved, the immediate outcome, the drawing, lost all significance. It was believed that this clarified why most artworks and prints appeared unrelated and could even be layered in complex palimpsests.

Ultimately, three forms of sympathetic magic were suggested to explain cave art. Initially, hunting magic was regarded as the most significant by a considerable margin. Through the depiction of animals and the use of spear-like symbols, a sorcerer made their slaughter easier. Incomplete animal outlines were interpreted as an indication that the creators aimed to weaken the animals and reduce their defensive capabilities. Geometric symbols were subsequently viewed as arms, injuries, or pitfalls. Secondly, it was claimed that destructive magic had been employed against the most perilous creatures, including bears, lions, and rhinoceroses. Thirdly, fertility magic contributed to the growth of herbivore populations by depicting mating activities or gravid females. The scarce human figures were interpreted as sorcerers or deities, particularly when they featured animal traits, such as those found in Les Trois Frères and Gabillou.

Throughout the years, sympathetic magic faced criticism and was ultimately discarded—not entirely, but as a universal explanation—for several reasons. Numerous contradictions were highlighted. If sympathetic magic was truly the foundation of Upper Palaeolithic religion and art, one would anticipate discovering a significant number of animals pierced by spears, numerous pregnant females, and explicit sexual depictions. Moreover, the animals that were hunted the most ought to have been the ones that were depicted most often. In reality, the current evidence that has gathered over the century is notably distinct. Animals showing weapons or injuries are uncommon, and pregnant females are almost as rare as mating depictions.

Additionally, there is no relationship between the animals consumed – indicated by fractured and burned bones found at habitation sites – and those depicted or inscribed in caves. Moreover, visuals such as handprints, chaotic lines, and hybrid beings cannot be satisfactorily accounted for by sympathetic magic.

Totemism: In the early twentieth century, influenced by nineteenth-century authors like James Frazer and sociologist Émile Durkheim, numerous scholars were drawn to totemism, viewed as an ‘elementary form of religious life’ and supposedly the oldest.

Based on this description, human societies often maintained a special connection, typically due to alleged ancestry, with specific animal or plant species deemed their ‘totem’ (a term from Algonquian) and that they would hold in high regard. Occasionally, the totemic hypothesis has received renewed interest in different forms from certain authors, yet it has never achieved the popularity of sympathetic magic. Its attraction likely arises from the depiction of numerous animal figures in cave art, while its lack of popularity relates to the commonly stated observation that caves are not dedicated to a single animal species (as might be anticipated with totemism); rather, most caves feature a very restricted variety of species. In a totemic society that spanned across Europe and persisted for millennia, there ought to have been significantly more variety in the themes depicted and inscribed.

Structuralism: During the 1960s, a novel philosophical framework captivated the minds of numerous social scientists; undoubtedly, it could not be described as simplistic or naive. Building on the earlier groundbreaking Marxist author Max Raphael, Annette Laming-Emperaire and especially André Leroi-Gourhan suggested a structuralist theory to explain the religious rituals believed to have occurred in the painted caves. Their perspective diverged from that of their predecessors by rejecting the initiation from an ethnographic hypothesis or employing ethnographic analogy. They believe that a thorough examination of the caves will yield sufficient evidence to grasp the general framework of Upper Palaeolithic religion. They acknowledged that details and likely even some crucial elements of Upper Palaeolithic religion were irretrievably lost.

The ‘general framework’, regarding structuralism, comprised a collection of binary oppositions that could be ‘interpreted’ such that one opposition (e.g. light : darkness) could represent another (e.g. good : evil). Structuralists like Lévi-Strauss argue that this type of binary and analogical reasoning is inherently part of the human brain.

For structuralists, the cave was a crucial component in the perceptions of its users. Upper Palaeolithic individuals did not disperse their illustrations haphazardly; instead, they positioned them thoughtfully based on a predetermined concept of an ideal ‘sanctuary.’ They carried the same mental model into each cave and adapted it to the specific landscape. Consequently, chosen animal species and specific geometric symbols were sketched adjacent to the

entrances or at the gallery's ends, while others appeared in alcoves and hidden corridors; notably, some were positioned on prominent central panels. The different shapes of the caves defined regions that were utilized in distinct ways or that held unique significance: for instance, fissures were seen as female, just like the cave itself.

The essence of the Upper Palaeolithic binary view of the world was sexual, according to Leroi-Gourhan and Laming-Empeire, meaning male:female. They observed that bison and horses, the most commonly depicted animals, were so frequently shown together that their connection exceeded mere chance. They subsequently proposed that horses and bison formed a binary contrast symbolizing the male and female principles, both in opposition and in harmony. According to Leroi-Gourhan, bison were regarded as female while horses were considered male; Laming-Empeire had the opposite view. Geometric symbols were assigned a masculine or feminine symbolic significance based on their forms: 'narrow' symbols represented male, whereas 'wide' symbols represented female.

Both the empirical aspects and the temporal element of the structuralist theory faced significant criticism. Consequently, its supporters either discarded it (Laming-Empeire) or subsequently voiced concerns (Leroi-Gourhan). Their doubts primarily stemmed from the fact that, in their pursuit of apparent objectivity via statistics, the criteria upon which those statistics relied were entirely subjective and occasionally circular. Leroi-Gourhan recognized that his theory offered an 'overly broad framework' instead of just an interpretation of Upper Palaeolithic religion.

Nevertheless, most contemporary scholars share Leroi-Gourhan's bleak outlook, although they extend it beyond his perspective. This is the reason they avoid understanding what the images might signify and are content with ambiguous ideas such as undefined religion, magic, totemism, myth expression, etc. They restrict themselves to practical work, much of it entirely essential. However, they do not address the issue of why Upper Palaeolithic individuals ventured deep underground to create their artwork on cave surfaces.

5.3.2 Ur- Religion

Up to now, we have explored some of the intricate evidence for – and the significant obstacles to uncovering – humanity's Upper Palaeolithic belief system. It's not surprising that prior authors frequently relied on somewhat ambiguous concepts like 'animism', the idea that the material world is enlivened by divine forces, or 'fetishism', the reverence for objects and animals, or the intellectuals' 'primitive aetiology', perplexed 'savages' creating strange supernatural entities to clarify natural events, or an initial belief in 'souls' and 'spirits' stemming from visions of the deceased. It's not surprising that pessimism and, even more troubling, widespread epistemological cynicism have become common in certain circles today. Fortunately, some researchers refuse to accept defeat in advance and think that the challenging task is worth tackling.

For numerous years, a notion has lingered in the background, unrefined and inadequately investigated: Upper Palaeolithic spirituality was, to some extent, shamanistic. Leroi-Gourhan rejected these weakly reasoned propositions. He highlighted the shallowness of equating photos of contemporary shamans with the depictions of 'sorcerers' in Les Trois Frères or Gabillou, or of drawing a simplistic link between the bird on a pole in Lascaux

and the practice in the American Pacific Northwest of placing a bird effigy atop a shaman's grave. He was indeed right.

Following those initial efforts, additional individuals have addressed the issue more comprehensively. Mircea Eliade believed it was not accidental that numerous similarities were found between shamanism in the Altai and in the Americas, suggesting that 'a particular type of shamanism was likely introduced to the two American continents by the initial waves of migrants'. He contended that shamanism was the earliest religion of humanity.

Weston LaBarre, Joan Halifax, and especially Andreas Lommel proposed that certain artworks and carvings in Lascaux and Les Trois Frères depict shamans along with their spirit guides. Recently, Noel Smith has suggested that certain motifs might symbolize 'vital forces' linked to a type of shamanism.

These are the ten important characteristics of shamanism practiced in the hunting gathering societies:

- (i) Essentially, hunter-gatherer shamanism is based on various altered states of consciousness, whether triggered by the consumption of hallucinogens, rhythmic stimulation like persistent drumming and dancing, hyperventilation, sensory deprivation, pathological states, etc. Dreams are also to be considered in this context. These states are commonly called 'ecstasy' or 'trance'. By necessity, they are institutionalized, meaning they carry social implications.
- (ii) Visual, auditory, and bodily experiences of altered states that are 'programmed' into the human nervous system lead to ideas of an 'alternative reality' that is often hierarchical. Three levels are typical, but socially intricate hunter-gatherers often recognize additional ones. This type of cosmology enables a connection with the supernatural realm. Cosmology acts as both a facilitator and a limitation.
- (iii) Individuals possessing unique abilities and talents, shamans, are thought to have access to this other reality. In certain cultures, each community has a single shaman; in other places, there are several. Certain shamans hold political power, while others lack influence beyond their ceremonial practices. The key aspect is that shamans act as links between their societies and supernatural beings. The command of ecstasy thus bears significant socio-political consequences in shamanic communities.
- (iv) The actions of the human nervous system in specific altered states generate the perception of detachment from one's body, often referred to as 'spirit loss' or 'out-of-body experience'. In hunter-gatherer societies, this experience is occasionally interpreted as being possessed by external spirits. Believers attribute trance or ecstasy to possession and extra-corporeal travel.
- (v) Reaching out to spirits and otherworldly beings;
- (vi) Regulating the activities and existence of actual animals;
- (vii) Curing the ill;
- (viii) Altering the climate.
- (ix) These functions and the entry into a changed state are thought to be aided by a differently understood

supernatural force, or energy, that could, in certain respects, be compared to electricity.

- (x) This ability is frequently linked to spirit-helpers (usually represented as animals) who convey it to shamans and support them in carrying out their duties. Typically, shamans meet their spirit-guide while on a ‘vision quest’. Determining whether certain shamans are considered ‘possessed’ by these spirit helpers is a question that varies from one community to another, although it is not an easy determination.

It will be evident that this descriptive definition is wide-ranging and not linked to any specific ethnographically documented shamanistic community; the limiting Siberia-centric perspective should be discarded. Certainly, considering the Ice Age lifestyle we outlined, it appears probable that Upper Palaeolithic shamanism did not perfectly correspond to any specific example recognized today. Researchers must be adaptable and avoid imposing ethnography on Upper Palaeolithic data. Ethnography must reveal distinct aspects of Upper Palaeolithic religion rather than conceal them. It should also be evident that some ambiguity at the boundaries—cases that are hard to define as shamanistic or not—does not undermine the core concept. In the ancient world, hunter-gatherers had spiritual leaders who would enter altered states to carry out tasks like those we mentioned. The prevalent existence of shamanism stems not from diffusionism but (in part) from a universal neurological heritage that encompasses the ability of the nervous system to achieve altered states and the necessity to interpret the ensuing experiences and hallucinations within a foraging community.

Check Your Progress CYP-II

Based on the understanding of the previous section, answer these questions in your own words:

- Q1. Discuss the early understanding of art and religion.

- Q2. Write a short note on the Ur-religion.

5.4 LET US SUM UP

In conclusion, the examination of art and religion during the Stone Age shows that this was not simply a primitive effort to survive but the initial emergence of symbolic consciousness and systemic belief with an aim for human

civilization. Stone Age art (cave paintings, petroglyphs, portable figurines or megaliths) indicates a high degree of cognitive development, abstract thinking and use of symbolism. These artworks were influenced by social, economic and ritual context rather than for the sake of beauty.

The early humans' religious practices are now believed to have been reflected in animism, totemism, and shamanism, as also elaborate burial practices. The presence of grave goods, the physical treatment of the dead, including burial practices, and sacred space suggests an early notion of the afterlife and supernatural forces. The Stone Age man was religious. This means that their religion brought them together, gave them comfort in a threatening universe and explained the universe. These practices bring about such ideas.

The interpretations of Stone Age art and religion have seen the shift from "hunting magic" to the more sophisticated notions seen in structuralism, cognitive archaeology, and symbolic anthropology. Contemporary scholarship has shown that the use of language, music, dance and art are not merely functional, but cultural which helps form identity, organize society and think early.

Consequently, the earliest stages of human efforts to understand life, control social life, and deal with the natural and supernatural the art and religion of the Stone Age. In the end, they are the cultural foundation on which later civilizations built more formal art and organized religion.

5.5 GLOSSARY

Animism: It is a belief that objects in the nature possesses spiritual essence or souls.

Totemism: A belief system in which a group of people has a spiritual connection with a particular animal, plant, or natural object considered sacred.

Shamanism: A religious practice involving a shaman (spiritual leader) who acts as a mediator between the human world and the spirit world.

Cave Paintings: Prehistoric wall paintings found in caves, often depicting animals, hunting scenes, and symbolic signs.

Rock Art: Artistic expressions created on natural rock surfaces, including paintings (pictographs) and engravings.

Fertility Cult: A system of beliefs and rituals centered on fertility, reproduction, and agricultural abundance.

Hunting Magic: A theory suggesting that cave paintings were created as part of rituals to ensure success in hunting.

Sympathetic Magic: The belief that actions performed on representations (such as drawings of animals) could influence real-world events.

5.6 EXAMINATION ORIENTED QUESTIONS

- Q1. Explain the different kind of art activities during the Stone Age.
- Q2. Examine the religious idea of totemism .
- Q3. Discuss the important the Ur-religion.

5.7 LESSON END EXERCISES

- Q1. Examine the sources of knowledge about the art and religion during Stone age.
- Q2. Explain the idea of Sympathetic magic.

5.8 ANSWER KEY

CYP–I

- Q1. Refer sub-section 5.2.1
- Q2. Refer sub-section 5.2.2

CYP–II

- Q1. Refer sub-section 5.3.1
- Q2. Refer sub-section 5.3.2

5.9 SUGGESTED READINGS

- Lewis-Williams, David & Pearce, David; “Inside the Neolithic Mind: Consciousness, Cosmos and the Realm of the Gods”; Thames and Hudson; 2005.
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STAGE OF FOOD PRODUCTION

SEMESTER-I

COURSE NO. HIST104

UNIT-II

LESSON 6

NEOLITHIC SOCIETY

STRUCTURE

6.0 Learning Objectives and Outcomes

6.1 Introduction

6.2 Neolithic Cultures in Southwest Asia

6.2.1 Levant

6.2.1.1 *Jericho*

6.2.1.2 *Netiv Hagdud*

6.2.1.3 *Abu Hureyra*

6.2.2 Zagros Mountains and Mesopotamia

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6.3 Neolithic Cultures in Europe

6.3.1 Greece and Southern Europe

6.3.2 The Balkan Region and Central Europe

6.3.3 Temperate Europe

6.4 Let us sum up

6.5 Glossary

6.6 Examination Oriented Questions

6.7 Lesson End Exercises

6.8 Answer Key

6.9 Suggested Readings

6.0 LEARNING OBJECTIVES AND OUTCOMES

Learning Objectives

The objective of this lesson is to enable you to:

- Understand transition from Hunting-Gathering subsistence pattern to more advanced adaptations into a sedentary farming economy.
- Analyse the reasons behind emergence of Neolithic cultures in various parts of the world.
- Explain about Neolithic sites across Southwest Asia and Europe.
- Discuss various characteristics of each Neolithic site.

Learning Outcomes

After going through this lesson, you will have clear understanding of:

- The beginning of permanent settlement and early social complexity.
- Neolithic sites, first farmers and reasons of their emergence.
- Different environmental conditions of the regions, its sites, and their development through the phases of Neolithic period.
- Lifeways, beliefs and gender roles etc. of Neolithic people in Southwest Asia and Europe.

6.1 INTRODUCTION

Dear learners, the Neolithic period, also called the ‘New Stone Age’, is one of the most revolutionising phases of human evolution. In about 9,500 BCE the Neolithic began in nearly whole of Southwest Asia and continued till 6,000 BCE in Mesopotamia and lasted until about 4,000 BCE along the coast of eastern Mediterranean. With the onset of Younger Dryas in about 10,500 BCE climate changed abruptly to cooler and very dry conditions. The cold and inhospitable climate probably led to experiments with wild cereal grasses such as rye and wheat. The earliest evidence of rye came from the village of Abu Hureyra on the Euphrates river in about 10,000 BCE.

The communities which adapted to the changing climatic conditions devised ways of storing, exploiting cereals and grinding seeds and assumed more sedentary lifeways. To adjust to the fluctuating climates and scanty supply of water during summers people shifted nearer to the water bodies. Here they cultivated cereals and legumes to continue the food supply adding to the wild plants. This led them to settle at a place permanently. Cultures such as Kebaran and Natufian were already permanent settlements since Mesolithic in Southwest Asia. Similarly, many settlements began in Levant, the Zagros and Mesopotamia and Anatolia region by 10,000 BCE.

6.2 NEOLITHIC CULTURES IN SOUTHWEST ASIA

6.2.1 Levant

The 'Levantine Corridor' as named by Bar-Yosef and Cohen (1992), in Southwest Asia was rich in water supply with high water-table, providing the right conditions for the foragers to shift cultivation of wild grasses from their natural habitat to well-watered locations near streams and lakes. The first farmers originated in the earliest sites of the world located in this Corridor- Netiv Hagdud, Abu Hureyra and Jericho. Natufians in this region were followed by the first farmers known technically as 'Pre-Pottery Neolithic A' (PPNA). The region was supposed to have begun with cultivating the three 'founder crops', emmer wheat, einkorn wheat and barley. The important marker of domestication of plants were in the rachis or the stem which attached the grain, the way spikelet or grain with its glumes and bulbs were designed. The most important evidence came from the PPNA site of Jericho and recently Netiv Hagdud and Abu Hureyra.

6.2.1.1 Jericho

Kathleen Kenyon (1981), came up with a detailed information on Jericho after excavating the site between 1952 and 1958. This is supposed to be the most-early Neolithic village established around 10,000 BCE. The site was surrounded by a stone wall with a tower nearly 9 m in diameter and 8 m tall. Kenyon suggested this wall to be early fortification of the village with thousands of people living within it while Bar-Yosef interprets it to be a defensive wall to prevent flood. The purpose of the wall is still debatable but the aspect which needs to be looked at is the labour organisation. The massive wall shows that the people were politically and economically organised. The houses within the defensive wall were beehive-shaped. The dead were buried within the settlement, under the house sometimes. Forty adult bodies without head have been found buried under the floor of a room. Excavating further a cache of skulls, reconstructed with plaster, then decorated and eyes being made with seashells was found. This represented either some kind of ancestor cult or war trophies. The village however showed no sign of class difference. Evidence of domesticated wheat and barley were found which are not native to this region. There was no evidence of domesticated animals from the site. Wild animals such as gazelles, goats, oars and cattle were hunted intensively.

6.2.1.2 Netiv Hagdud

In a recent excavation, another PPNA site, Netiv Hagdud was discovered in the lower Jordan Valley, 13 kilometres north of Jericho. The site was settled sometime after 10,000 BCE for nearly 300 years. Bar-Yosef (1991) excavated the site and revealed that it had circular and oval structures and storage facilities. The residences

identified were of two types-large oval structures about 8-9 m long and smaller circular houses 4-5 m in diameter. Limestone slabs were used as base on which unbaked mud brick walls were built supported by wooden posts. Storage facility also features in two forms-large and circular bins and clay silos about 1 m diameter. The site also revealed 22 burials found in a flexed position in shallow pits, within and outside houses. People exploited marine resources such as fish, eels, snails, crabs etc. Animals such as gazelle and wild pigs were hunted and collected more than 50 species of wild plants including nuts like pistachios, figs, almonds and acorns. The site is important because it specialised in domesticating only one type of cereal plant, barley.

6.2.1.3 Abu Hureyra

Andrew Moore (1978) excavated the site of Abu Hureyra situated near the Euphrates in Syria. Initially the site had pit-dwellings with reed roofs supported by wooden posts. About 10,500 to 10,000 BCE climate changed to having warmer and wetter conditions. In this steppe area animals and wild cereals were in abundance. This led hunter-gatherers to settle permanently and cultivate wild cereals. Domestication began around 10,000 BCE in rye, einkorn and lentils. Gradually the settlement became larger and about 9,000 BCE a new village settlement developed on a low mound. The houses were of mud bricks and the dead were buried under the house floor. During this time Persian gazelle was still hunted. Later new structures were rebuilt on the same place. The houses were multi-roomed with polished black plaster floors. The floors were sometimes decorated with red designs. Goats, sheep, cattle and pig were domesticated by now as gazelle population declined. A mixed farming economy had developed in Abu Hureyra. By 6,500 BCE the site was abandoned.

6.2.2 Zagros Mountains and Mesopotamia

The Zagros and Mesopotamia region revealed two phases of Neolithic-early Neolithic between 10,000 and 6,000 BCE and later Neolithic till about 5,000 BCE. This region is supposed to have the earliest animal domestication. Similar to Levant having 'founder crops', Zagros mountains had 'founder animals', domesticating sheep and goat with pigs and cattle following within 500 years. Some contact must have been with the Levant but otherwise the region had independent cultural developments. Mesopotamian area was extensively studied by Robert Braidwood. The southern Mesopotamia later on developed into great Sumerian Civilization. The farming villages have been found under city mounds such as Ur and Eridu about 5,800 BCE. The lowland area was favourable for cereal crops while the hilly slopes of the Zagros was ideal for herding sheep and goat. Goat seems to have been domesticated earliest in the Zagros. It was so suggested by scholars that this region developed herding before any other part of Southwest Asia. Some of the important sites excavated in this region are Zawi Chemi Shanidar, Ganj Dareh, Jarmo and Ali Kosh.

6.2.2.1 Zawi Chemi Shanidar

People settled in Zawi Chemi Shanidar in about 10,000 BCE. In the foothills of the mountain, wild goats were the primary hunt. People were hunting and gathering this time and lived in small circular huts. The evidences also indicated towards large scale killing of immature sheep, perhaps kept fenced for intensive hunting. The site acted as a summer encampment. Some evidences of cereal cultivation were also revealed.

6.2.2.2 Ganj Dareh

Ganj Dareh is another early farming village occupied around 10,000 BCE. In the beginning it was a kind of seasonal camping site, which developed into a permanently settled village in about 8,000 BCE. The houses were rectangular in shape and made of mud bricks. Some of these houses were even two stories high. The lower part of the house was used for storage purposes as clay bins have been found. Goat and cattle herding were their prominent subsistence with some cultivation. Goat herding has been documented here about 7,000 BCE. The evidence points towards well managed herds. Large number of goat bones, mostly of sub-adult males and older females indicate towards domestication strategy.

6.2.2.3 Jarmo

Towards the southeast of Zawi Chemi Shanidar, a permanent settlement came up in about 7,000 BCE. This was the farming village, Jarmo. Cluster of some 25 houses built of mud bricks also had alleyways and courtyards. The structures had storage bins and clay ovens. Crops such as barley, emmer wheat and other minor crops were cultivated. Bones of sheep and goats have been found. Exotic materials such as seashells, obsidian and turquoise are found here in abundance and was traded into the Zagros from far off region. The long-distance trade was recorded on clay tokens, found in abundance at Jarmo. People were engaged in intensive farming and most of the food came from crops and herds.

6.2.2.4 Ali Kosh

In the lowlands, along the eastern edge of the flat Mesopotamian plain, the site of Ali Kosh was situated. The site was occupied around 7,500 BCE. The houses were made of mud bricks and rectangular in shape with several rooms. In the following times the size of the houses increased, separated from each other by lanes and courtyards. The houses were furnished with reed mats, stone bowls and other household goods. Gazelles, wild asses and pigs were hunted and wild plants collected during this phase. Sometime between 8,000 and 6,500 BCE, people began domesticating two-rowed, hulled barley, einkorn, lentils and emmer wheat. Wild wheat was not native to this region and must have been domesticated elsewhere. Sheep and goats were herded and perhaps moved to highland pastures during summers. Even in the present times such transhumance pattern is followed in this region. Ali Kosh is also important as here evidence of first irrigation has been found which led to agricultural intensification.

6.2.3 Anatolia

The highland and lowland environment of Anatolia or Turkey was suitable for human settlement. Early sheep herding has been documented at sites such as Bouqras, Cayonu and Ras Sharma, between 6,700 to 6,200 BCE. Apart from sheep and goat a wide range of wild cattle and pigs were domesticated in this region. The site of Hallan Chemi shows evidence of pig domestication about 8,000 BCE, perhaps much before sheep and goat. The site also documents sedentary settlement before farming and pig domestication began. Hallan Chemi shows evidence of extensive obsidian trade from around 9,500 BCE. Other major sites are Cayonu, Hacilar and Catalhoyuk from where we get extensive information on domestication of plants and animals in this region.

6.2.3.1 Cayonu

Cayonu was occupied between 8,600 to 7,000 BCE. The site was occupied in two phases. The first phase lasted for about 650 years. During this phase people lived in separate rectangular houses with various designs. Evidences of cultivated cereals and pulses have been found. Sheep domestication began from about 7700 BCE. Cayonu was a well-developed farming site where sheepherding got adopted suddenly. Scholars indicate that herding sheep at Cayonu resulted as a contact with shepherd community living in the highlands nearby, subsisting on herding small stock of sheep for a long time.

6.2.3.2 Hacilar

This region was a major source of obsidian for toolmaking since the beginning of Holocene. Villages were near to the volcanic rocks which were used for various artefacts. Obsidian was also traded to eastern Mediterranean coast and Persian Gulf. The site of Hacilar was excavated by James Mellaart (1975) in this region. It was occupied in seven phases, first settlement coming up around 8,000 BCE. The houses were rectangular with courtyards, ovens, hearths and plastered walls. Leather containers and basket were made for storage purposes. With domesticated barley and emmer wheat, people also ate wild grass seeds. Evidence of only dog domestication has been found though bones of sheep, goats, cattle and deer are present too.

6.2.3.3 Catalhoyuk

The village or town of Catalhoyuk was built on a huge mound spread over a large area having many houses built of sun-dried brick. The houses were built back-to-back separated by small courtyards with flat roofs. The houses had defense walls for protection. With passing time either the houses began to collapse or population increased as evidence indicate towards rebuilding of the town 12 times. Catalhoyuk revealed artistic tradition with paintings and carvings on carefully plastered walls. The theme of the depiction were mostly shamanistic practices in the form of dances, women, bulls, ancestors and birth giving scenes. The dichotomy between male and female indicated some form of divine family personified. Control over obsidian and its trade brought prosperity to Catalhoyuk. Richly adorned burials have been found here which indicate towards class differentiation in the society.

Southwest Asian farmers traded not only in obsidian but in many other materials such as marine shells, serpentine, turquoise, jadeite and other exotic objects after 9,000 BCE. Apart from economic purposes these exchanges were also used for cementing social relations between communities. The raw material exchanges led to spread of ideas and innovations including herding, pottery making and later copper and bronze metallurgical technology. Spectrographic analysis suggests vast number of sites trading in obsidian. The trade happened not only between the sites of Anatolia but also with the villages of Levant.

The above-mentioned Neolithic sites and many others give a profound profile of the cultures originating in the regions of Levant, Zagros mountains and Mesopotamia and Anatolia. Major Neolithic characteristics such as changes in social structure, mechanisms of social control, cultivation, polished and grinding toolmaking, herding, pottery making, religious rituals and permanent settlement can be understood through the profiles of various sites

spread in Southwest Asia. Farmers were engaged in complex rituals and ancestor cults suggesting some kind of relationship between living and the spiritual world. Bruce D. Smith (1995) suggested three stages of Neolithic development. The first as experimental stage of cultivation of wheat and barley in rain-fed areas of Levantine Corridor. Some societies took to farming while others continued to forage. The second stage developed in the Zagros where goats and sheep were domesticated. Cereal cultivation with animal domestication formed the part of economy during this phase. By the third stage many farming communities adopted mixed farming, adding cattle and pig domestication. Some of these huge sites were referred to as towns or 'proto-cities' by few scholars. Some towns for the first time showed new type of social ranking later developing into urban centres in the great Mesopotamian civilization.

Check Your Progress (CYP) -I

A. On the basis of your understanding of the previous sections, answer the following questions in your own words:

Q 1. Discuss the structure of houses and lifeways of any one site of 'Levantine Corridor'.

Q 2. Describe the importance of Zagros Mountain and Mesopotamian region during Neolithic period. Support your answer with example.

Q 3. Highlight the important features of the site Catalhoyuk in Anatolia region.

B. Multiple Choice Questions:

1. The earliest evidence of 'rye' came from
 - (a) Abu Hureyra
 - (b) Jericho
 - (c) Catalhoyuk
 - (d) Jarmo
2. The 'Levantine Corridor' was named by
 - (a) Gordon Childe and Robert Braidwood
 - (b) Bar-Yosef and Cohen
 - (c) Carl Sauer and Barbara Bender
 - (d) John Lubbock and Lewis Binford
3. The houses within the defensive wall were beehive-shaped in
 - (a) Jarmo
 - (b) Catalhoyuk
 - (c) Jericho
 - (d) Ganj Dareh
4. 'emmer' and 'einkorn' are variety of
 - (a) Wheat
 - (b) Barley
 - (c) Maize
 - (d) Millet
5. Which site has revealed artistic tradition with paintings and carvings on plastered walls
 - (a) Hacilar
 - (b) Alikosh
 - (c) Catalhoyuk
 - (d) Jarmo

6.3 NEOLITHIC CULTURES IN EUROPE

Farming in Europe raises questions as to whether it was a result of diffusion from Southwest Asia or developed independently in the temperate zone? The reason some scholars believed in diffusionist theory was that they assumed Europe as separate geographic units separated by Turkey and rest of the Southwest Asia. Also, their assumption was that as population increased in Southwest Asia the surplus farmers moved to Europe with their herds and cereal crops. However, it is difficult to accept this view since there is no evidence of extremely high population in Anatolia region. The Southeastern European sites further were located in environmentally favourable locations, which its inhabitants could only be familiar with. Farming in Europe began almost 2000 years after Southwest Asia, i.e. in around 8,000 BCE so most likely it spread from there. Still scholars have not agreed on this and discussion continues.

Pollen evidences from northern Greece indicate towards the presence of barley and other cereals much before farmers appeared about 6,000 BCE. During early Holocene the cereal grasses moved into temperate regions of Europe before woodlands spread. Wild sheep were most likely an early domesticate since it was found since Upper Palaeolithic Europe. Robert Dennell (1983) proposes three stages of development in food production in Southeastern Europe. In the first instance, during early Holocene climatic conditions were favourable for cereal crops such as einkorn and barley which grew in abundance and were exploited by the foragers to support their hunt year-long or sometimes for short period as these wild grains were unpredictable. In the second stage the trees colonized this area with scattered grasses. People cleared the area by burning or ring-barking the tree trunks. These spaces were used for growing wild grasses. With time gradually new shoots would have come out in the cleared land which attracted deers, wild sheep and other animals. According to Dennell (1983), interdependence between plant harvesting and herding developed in these regions and people lived in seasonal camps or small transitory settlements as have been seen in Mesolithic times in this region. In the third stage agriculture was established permanently. Large-grained tough rachis cereals got introduced either naturally or through local interaction. Emmer wheat and bread wheat like those found in Southwest Asia were cultivated. These varieties required more care and work to be cultivated for which fields needed to be prepared and carefully sown. Also, they needed weeding regularly to protect from other wild growth. They had to be rotated to keep the nutrients intact. Emmer wheat and bread wheat exhausted large quantity of soil nutrients so the soil had to be regenerated by using animal manure or by planting nitrogen fixing leguminous plants. A new subsistence pattern emerged integrating cultivation and animal husbandry. This subsistence strategy helped supply food to individual households according to their needs and requirements. This model given by Dennell supports indigenous beginning of cultivation in Southeastern Europe as well as indicate towards some interaction with Southwest Asian people between gap years leading to gradual shift of new domesticated crops and animals from the region.

While the environment of Mediterranean Europe or the Southern Europe had some resemblance with Southwest Asia, the temperate Europe towards north was completely different and so farmers never encountered wheat, barley as cereal crops and animals such as sheep and goats. However, the earliest European farming settlements have been found in Greece where crops and animals show affiliation with Southwest Asia.

6.3.1 Greece and Southern Europe

Many rivers and lakes cut across the plains of Greek Thessaly region. The environment was favourable for natural irrigation. Near about 7,000 BCE farmers settled in this region. They cultivated emmer wheat, and barley and herded cattle, sheep and pigs. Scholars like Van Andel and Runnels (1995) argued for expansion of cultivation in this region and Southeastern Europe from Anatolia. Gradually farmers spread to mountainous terrains. The Franchthi Cave in southern Greece was a Mesolithic site and it continued with farming settlements around 6,000 BCE where people herded goats and sheep. About 5,500 BCE entire Greece was settled by farming communities and also along Adriatic Sea.

The site of Grotta dell Uzzo in northwest coast of Sicily in Southern Europe had been occupied by hunter-gatherers. Somewhat between 6,000 and 5,800 BCE the settlers began growing einkorn wheat, barley and lentils. People also herded cattle and few other animals. By 5,000 BCE people in this region were shepherding and farming.

6.3.2 The Balkan Region and Central Europe

The Southeastern Europe with countries like Serbia, Croatia, Romania, Bulgaria, Serbia, Bosnia, Hungary, Switzerland and Herzegovina etc. constitutes the Balkan region and Central Europe. Between Serbia and Romania late foragers emerged while agriculture was spreading fast. The site of Lepenski Vir had been settled many times and had many huts with stone hearths. The huts had human-like faces but with fishlike mouths. There are evidences of animal bones such as red deer and boar in the early levels while upper levels reveal pottery and bones of domesticated animals.

The earliest farmers settled in the floodplains of this region. Karanovo culture settled about 5,500 BCE. People lived in close-knitted one-roomed huts made of baked mud plastered on poles and wicker. They cultivated wheat and barley and domesticated sheep and goats. People had trading relations with the Mediterranean world as spondylus shell, clay seals and figurines, reaping knives etc. have been found. The soil is permanently moist and environment variable which provide favourable conditions for farming like Southwest Asia.

An early farming culture that developed in Central Europe is the Bandkeramik culture or the Danubian complex. This has been named after its characteristic linear-decorated pottery. In the Middle Danube around 5,300 BCE first settlement emerged. People settled along river valleys in small huts separated from each other. The houses were rectangular and made of timber and thatch. The houses were probably used to provide shelter to people along with their animals and grains. They cultivated einkorn, barley, emmer wheat, flax and other minor crops. They also followed the crop rotation and fallowing to regenerate soil nutrients which led people to remain at the same site for long. Herding cattle was most important to Bandkeramik people. However, they kept goats, sheep and dogs too.

By 4,800 BCE these people spread in the west into southern Holland and in the east into Poland. Scholars are of different opinion over Bandkeramik people and their spread over time to other regions of Europe. Some scholars take it as colonisation by the farming communities from Southeastern Europe while others propose heterogeneity

in early period of culture due to late Mesolithic interaction. There were indigenous changes from hunting-gathering to cultivation rather than colonisation.

6.3.3 Temperate Europe

Farming was introduced in the Northern and Northwestern Europe between 6,000 BCE and 3,500 BCE. The farming emerged both as indigenous practice as well as through diffusion. The climate in this region have year-round rainfall and summers and winters are contrasting. The soil is heavy and forest cover consisted of oaks and other shadier trees that reduced the grazing of animals such as deer and wild cattle. The region was earlier settled by Mesolithic people who exploited the several ecological zones. The earliest farming communities settled in the loess soil of Central Europe which was more fertile and could be easily tilled with simple sticks and hoes. However, the agricultural communities settled along the southern part of Northern European Plain, the Northern foothills of the Alps and the Atlantic coastal regions of Western Europe. Cultivation reached these regions quite late probably because of abundance of foraging resources which gave no reason to the inhabitants to shift their subsistence strategy. For almost 1,500 years to 1,000 years foragers and farmers existed adjacent to and interacted with each other. Sometimes the communities came together and other times were hostile to each other as can be seen in the fortification ditches at sites in Belgium and Germany.

Gradually through these interactions cultural and material exchange occurred. Domesticated plants and animals, pottery and stone tools etc. got passed between the communities. Peter Bogucki (1995) has suggested that the North European foragers modified the landscape of the region with open forest and woods which provided favourable conditions for the escaped cattle, goat and sheep. In the beginning they were used as hunt and later got domesticated. Farming techniques and crops perhaps got traded by the farmers to foragers in exchange of forest products. Evidences of such kind of intermixing comes from the Rhine Maas delta in Netherlands.

Along the Mediterranean coast towards the west of Spain, agriculture spread during same time as North Europe. Scholars were of contrasting opinion over cultivation in this region, whether it was colonization or adoption by late foragers. Dominant view suggested indigenous origin since evidences indicated towards many food-producing characteristics occurring nearly 1000 years before, i.e. around 6,500 BCE sedentary farmers emerged. Evidence of pottery came from Tuscany from the level in which there was no evidence of farming economy. Randolph Donohue (1992) is of the opinion that almost all the sites in the Mediterranean region show domestication of sheep and pottery much before the origin of Neolithic economy.

Northern France, southern Scandinavia, the Alpine Foreland and British Isles show adoption of agriculture by the foragers. British Isles show evidence of some kind of watercraft to transport domesticated animals and seeds of crops from the European landmass. Zvelebil (1993) suggested that the first farmers in Ireland were the last Irish foragers. But Grogan (1994) on the other hand proposes colonisation of the region by the British farming communities.

Origin of Agriculture in Europe was not a uniform process. In regions such as Greece and Central Europe with alluvial soil and sparse population perhaps was colonised by farming communities from outside region. In the

regions with large foraging populations, cultivation was not adopted quickly and got into the economy as part of subsistence strategy gradually.

Origin of agriculture and animal domestication emerged in different time and space across the globe. Favourable climatic conditions and growth of variety of wild cereal grasses changed the dietary pattern of humans. Scholars have different opinions over the reasons of origin. But they uniformly believe that agriculture originated in Southwest Asia around 10,000 BCE, closely followed by other regions of the world. Wheat and barley are supposed to be the earliest cereal crops. Domestication of both plants and animals brought genetic changes in their wild varieties. With time plants and animals provided all necessary nutrients to human diet supplementing each other. Changing dietary pattern and better nutrition led to population increase. People settled permanently in villages near around water bodies since they got continuous food supply and water. They began making pottery to store surplus food that they acquired for lean period. They also began making clothes out of animal skin, cotton or flax seeds. Wheel was invented around 6,000 BCE which enhanced pottery making technique and gradually transportation easier and faster when used with bullocks or horses.

Farming and animal domestication not only brought benefits with them but also different types of problems. Prominently air, water and land borne diseases caused by pests, pollens and animal defecates. With no population control measure, this natural process balanced the nature. The rising population led to many social complexities along with beginning of some initial political control over the resources. Further in time technology got advanced with need and demands of the rising population. By the end of Neolithic, scholars indicate towards the use of metals, especially copper finally mastering the technique of mixing copper and tin to make bronze. Metallurgical technique and other technological advancements with receptivity of the people to these changes introduced the world to a new era of Bronze Age Civilizations-Mesopotamian, Egyptian, Chinese and Minoan.

Check Your Progress (CYP) -II

Fill in the blanks:

- a) Farming in Europe began in around
- b) Pollen evidences from northern Greece indicate towards the presence ofand other cereals.
- c) Somewhat between 6,000 and 5,800 BCE the settlers began growing,and lentils.
- d) The earliest farmers settled in the floodplains of the Balkan region was
- e) An early farming culture that developed in Central Europe is the Bandkeramik culture or the

6.4 LET US SUM UP

In this unit we have learnt about the emergence and growth of Neolithic societies. We discussed Southwest Asia

and Europe and various sites located within these Regions. These sites have been extensively excavated and give us clear picture of housing structure, extent of village, defensive walls, etc. You have been introduced to geographical features and environmental conditions of different Regions. Discussion has also been made on lifeways and emerging social complexity of the Neolithic people based on the location of sites. Detailed study of Neolithic sites and its material cultures has also been done in time and space. We also learnt about the first farmers and first domesticated plants and animals.

6.5 GLOSSARY

Neolithic: Neo means ‘New’ and lithic is ‘Stone’ which constitutes as ‘New Stone Age’.

Younger Dryas: A period in geological history ranging between c. 13000-11000 years Before Present (BP) which ushered in rapid cooling of Earth’s climate.

Pre-Pottery Neolithic A’ (PPNA): This is the early phase of Neolithic period when pottery making technology was not invented.

Founder Crops: The first crops to be domesticated that are emmer wheat, einkorn wheat and barley.

Founder Animals: The earliest animals to be domesticated such as pigs, sheep and goat.

Proto-cities: The phase before emergence of proper cities and towns.

6.6 EXAMINATION ORIENTED QUESTIONS

Short Questions

1. Where did earliest farming communities emerge in Europe and why?
2. What are the characteristic features of Bandkeramik culture?
3. Discuss the Pre-Pottery Neolithic sites of Levantine Corridor.
4. Which crops were the first to be domesticated and how?

Long Questions

1. Review the different aspects of Neolithic economy and society on the basis of sites in South West Asia.
2. Examine the beginnings, and features, of food producing economy in South West Asia.
3. Assess the distinctive features of Neolithic economy and society in Europe.
4. Write an essay on the Neolithic patterns of settlement and subsistence in South West Asia.
5. Discuss sites, its emergence and development in Southwest Asia.

6.7 LESSON END EXERCISES

- Q 1. Discuss the role of ‘Levantine Corridor’ in the emergence of plant and animal domestication.

- Q 2. Explain 'Pre-Pottery Neolithic A' (PPNA) with examples from various sites in the Levant region.
- Q 3. How did cultivation help in permanent settlement?
- Q 4. Discuss the emergence and spread of agriculture in Temperate Europe.

6.8 ANSWER KEY

CYP-I

- Q1. See sub-section 6.2.1
- Q2. See sub-section 6.2.2
- Q3. See sub-sub-section 6.2.3.3

Multiple Choice Questions:

1. (a) 2. (b) 3. (c) 4. (a) 5. (c)

CYP-II

Fill in the blanks:

- a) 8,000 BCE
- b) Barley
- c) einkorn wheat, barley
- d) Karanovo culture
- e) Danubian complex

6.9 SUGGESTED READINGS

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STAGE OF FOOD PRODUCTION

SEMESTER-I

COURSE NO. HIST104

UNIT-II

LESSON 7

THE BEGINNINGS OF AGRICULTURE

STRUCTURE

- 7.0 Learning Objectives and Outcomes**
- 7.1 Introduction**
- 7.2 Beginnings of Food Production**
 - 7.2.1 Environmental Changes and its Impact**
- 7.3 Domestication of Plants and Animals**
 - 7.3.1 Domestication of Plants**
 - 7.3.2 Animal Husbandry**
- 7.4 Agriculture and Its Impacts**
 - 7.4.1 Impact on Dietary Habits of Human Beings**
 - 7.4.2 Impact on Settlement Pattern and Human Behaviour**
 - 7.4.3 Occupational Diversification and Defined Gender Roles**
 - 7.4.4 Emergence of Class Structure**
- 7.5 Technological Advancements**
- 7.6 Let us sum up**
- 7.7 Glossary**
- 7.8 Examination Oriented Questions**
- 7.9 Lesson End Exercises**
- 7.10 Answer Key**
- 7.11 Suggested Readings**

7.0 LEARNING OBJECTIVES AND OUTCOMES

Learning Objectives

The objective of this lesson is to enable you to:

- Familiarise with terms such as Domestication, Cultivation etc. in relation to plants and animals.
- Understand reasons behind emergence of first farmers.
- Describe how different plants and animals responded to climate in various parts of the world.
- Discuss domestication process of both plants and animals.
- Trace the features of Neolithic period such as polished tools, pottery, wheel etc.

Learning Outcomes

After going through the lesson, you will develop a clear understanding of:

- The causes behind the beginning of permanent settlement and cultivation.
- Technicalities of domestication process of both plants and animals.
- Newer ways of exploiting plants and animals brought about due to greater sedentism by the first farmers.
- The reasons of rapid spread of food production across the world.
- Advanced technologies and its impact.

7.1 INTRODUCTION

Dear learners, the Holocene brought new type of subsistence and social restructuring around the world between 12,000 and 3,000 years ago. The changes came about differently across the Old and the New Worlds in different timescales. The transitions were brought about probably due to opportunities provided by the great variety of vegetation, fauna and habitable climate across the globe. Economy had become more specialised and intensified. Society too had developed complexity due to longer sedentism. However, this restructuring was indispensable for further developments in society and economy. Humanity from here on progressed into a much advanced and irreversible phase by producing food and domesticating animals. Mesolithic, so was a period of momentous change. But, one of the most revolutionising moments in human evolutionary history came with agriculture or food production. Food production completely changed the lifeways of people and gave an overhaul to dietary habits. However, the question arises why did human beings took to farming so rapidly despite early cultivation being time consuming, slow in production, labour intensive and demanding heavy manual work?

It was probably because the domestication of plants and animals brought such remarkable changes that hunting got confined only to a ritual activity or sport. There are three major types of evidence on which it was dependent: a) on the availability of flora and fauna outside their habitat, b) morphological changes, c) increase in numbers of plants and animals. The process of domestication required human intervention and control over these species. Till

Mesolithic period, people mostly exploited the flora and fauna available to them naturally, moving from one region to another depending on climatic changes and animal migration. The interaction between plants, animals and humans was a gradual process continuing since millions of years.

7.2 BEGINNINGS OF FOOD PRODUCTION

“Agriculture is not to be looked on as a difficult or out-of-the-way invention, for the rudest savage, skilled as he is in the habits of the food-plants he gathers, must know well that if seeds or roots are put in a proper place in the ground they will grow”. [Sir Edward Tylor, *Anthropology* (1871)].

Sir Edward Tylor’s view suggests a gradual process towards cultivation which came through thousands of years of experience living with variety of plants and animals during the Mesolithic period. This new subsistence pattern accelerated the population growth, led people to settle down permanently near their farms forming village communities, and brought cultural change over the period. As people began to settle down in different parts of the world, in different ecological conditions, they began to intervene more and more in the immediate natural environment. The needs of settled people increased so as to protect their farm, their house, their family, giving rise to a sense of personal property and ownership of land. The needs also arose for mobility, storage of surplus, and exchange of surplus of food as well as other products etc, giving way to new inventions such as pottery, wheel, barter system and so on as the Neolithic phase advanced. When the dietary pattern changed people grew and ate more of protein, grains and fruits leading to healthy life and longer life span, hence enhancing the reproduction health of men and women and better growth of children. Also, the farms needed more hands to work on, which could be substantiated by producing more children. As we know even during Mesolithic, societies such as the Natufian and Kebaran, had already experimented with domesticating some wild grasses and lived an almost permanent life. This entire change came as a ripple effect of the food production.

7.2.1 Environmental Changes

Human intervention required for genetic changes in plants and animals for domesticated variety. This was neither post-Pleistocene adaptation, neither led to sudden sedentism in the life of hunting-gathering society. Environmental changes brought structural changes in plants and animals over the period. Around 11,700 BP (Before Present) during late Pleistocene there was worldwide climatic changes. It was seen as the onset of neo-thermal environmental conditions fluctuating from cold to warm and moist to dry. The last glacial period lasted for almost 2000 years between c. 12,700 and c. 10,950 BCE and this was the period when earth’s temperature rose massively and sea-levels increased. This was the last glacial period which was followed by the Younger-Dryas Interval between c. 10,950 and 9,650 BCE. This phase saw a brief period of intense cold followed by warm period which continued thereafter. It was these environmental fluctuations which led to change in the world geography. Huge ice-sheets melted making the vast lands of North America and northern Europe available for human settlement.

The vegetation changed across the globe with changes in climate. Recent researchers suggest, that atmosphere during early Holocene was rich in carbon dioxide supporting greater photosynthesis. Those plants and animals who survived this climatic change became more resistant to extremes of climate while many species, particularly

the megafauna of the Pleistocene such as woolly mammoth, woolly rhinoceros and bison etc got extinct. As ice-sheets reduced and shifted to the alpine region, reindeers also followed. Smaller animals like deer, pig, wild horse, wild sheep, gazelle and fowl etc not only survived but also multiplied in number. Therefore, it is evident that the hunting-gathering societies during early Holocene period braved severe climatic changes and food shortages by increasing their dependency on broad-spectrum economy. Thus, the Mesolithic period signifies these various adaptations and shifts where hunting and gathering got more specialised, fishing was included in the diet and humans began to experiment with available plants and animals to overcome food shortages. Material culture from excavation of various sites indicate towards these cultural changes during the early Holocene period.

7.3 DOMESTICATION OF PLANTS AND ANIMALS

Agriculture and animal domestication originated in different time and space across the globe. Favourable climatic conditions and growth of variety of wild cereal grasses changed the dietary pattern of humans. Scholars have different opinions over the reasons of origin. But they uniformly believe that agriculture originated in Southwest Asia around 10,000 BCE, closely followed by other regions of the world. Wheat and barley are supposed to be the earliest cereal crops. Domestication of both plants and animals brought genetic changes in their wild varieties. With time, plants and animals provided all necessary nutrients to human diet supplementing each other. Changing dietary pattern and better nutrition led to population increase. People settled permanently in villages near around water bodies since they got continuous food supply and water. They began making pottery to store surplus food that they acquired for the lean period. They also began making clothes out of animal skin, cotton or flax seeds. Wheel was invented around 6,000 BCE which enhanced pottery making technique transportation easier and faster when used with bullocks or horses.

Let us also first understand the concept of ‘agriculture’, ‘cultivation’ and ‘domestication’ before learning about the process of domestication of plants and animals.

- a) **Agriculture:** When human intervention leads to modification in plants and animals to increase their productivity and usefulness, it is conceptualised as agriculture. Through various farming activities such as watering, weeding, hoeing, placing scarecrows for prevention of crops etc, people have been investing their labour to sought food. Agriculture, generally involves purposeful and systematic modifications in plant and animal species.
- b) **Cultivation:** This term is mostly interchanged with Agriculture, but Blumler and Byrne define it as ‘plants that grows from shoots, seeds, shoots and bulbs etc’ According to them cultivation probably preceded long before domestication and cultivated plants were not always domesticated.
- c) **Domestication:** Domestication is essentially defined as *mutualism* in which symbiotic protection and dispersal relationship is developed between human and flora-fauna. This is co-evolutionary process where original gene pool of any species changes due to interference. This interference has produced species which are mostly unfit for survival independently as compared to its undomesticated relatives. For example, domesticated plants lose their natural dispersal power and needs human interference as

maize crop. Similarly, animals many times require help to mate like a variety of sheep in Southwest Asia. (Wenke, 231).

7.3.1 Domestication of Plants

The number of plants domesticated were very few as compared to what was foraged over the millennia. Wheat, barley, maize and other cereals that grew wild across Asia and Europe became cultivated in the Old World. In the New World, different type of crops such as corn along with root crops like manioc and sweet potatoes, chilli peppers, tobacco and many types of beans were domesticated. Later on, gourds, cotton and few more minor crops were domesticated in both the Old and the New Worlds.

The first crop to be domesticated was wild wheat closely followed by barley in the Old World. The quality of the wild variety of wheat and barley was very different from the domesticated equivalents. As wild variety they were found in dense stands and could be harvested just by tapping the stem with hands or stick. Then the seeds were collected in a basket while they fell off. The wild grain was attached to the stem by a fragile joint or 'rachis' and so tapping technique was effective. The wild wheat and barley grasses were also brittle-rachis type and so were large enough to produce domesticated version within two to five years. People probably selected the semi-tough rachis variant unconsciously in the beginning. Few wild grasses had genetically tough spikes that did not become brittle. The seeds of these grasses lasted longer but could not disperse in the nature easily. Use of sickles or uprooting single grass to harvest ripen seeds-rather than tapping them into the waiting basket-accelerated the process. These semi-tough variants could be domesticated within 20-30 generations, i.e. 20 to 30 years. Through experiments and DNA fingerprinting studies it is confirmed that by following even less intense 'selective pressure' these wild grasses could be domesticated within one to two centuries.

Archaeo-botanists have located wild grasses of einkorn in southeastern Turkey as a source of first domesticated wheat crops. About 10,000 BCE at the site of Abu Hureyra in Syria, farmers appeared suddenly. The evidence from this site show one level with wild seeds and the next level with domesticated strains suggesting rapid changeover from wild to domesticated variant. The basic variety of wheats are 'diploid', i.e. having two sets of seven chromosomes. After hybridising with other related variant 'tetraploid' wheats with four sets of seven chromosomes was produced. Further hybridisation produced 'hexaploid' wheats, with six sets of chromosomes, found only in the cultivated species of wheat. Early farmers thus produced forms of wheat by mixing genetic material from different species which could adapt to various habitats. Hunter-gatherers must have collected these wild edible seeds to supplement their diet. Harvesting the tough spiked plants with intact heads was more beneficial for them but their cultivation required additional efforts. These wild grasses grew along with other plants and grasses in the soil conducive for their growth. So to cultivate, those people had to sow the seeds in the areas away from the wild, self-seeding plants to avoid competition among these plants.

The seeds also had to be sown at a level ground near some water source or in the region with adequate rainfall. The Fertile Crescent region, Syria, upper reaches of river Euphrates and Jarmo on the Zagros Mountains, provided required conditions to the growth of these plants. Evidences of these tough spiked cereals have been found away from their natural habitat and are indistinguishable from the wild varieties. This highlights the importance

of human intervention in this process with an aim to produce free-threshing, non-shattering varieties. It is also seen that food-cultivation led to the development of complex society due to prolonged stay at a particular place. They also began storing the produce in grain bins, jars, or clay-lined pits. They also used gourds to carry water for cooking and other purposes since pottery did not appear along with agriculture. These crucial adaptations gradually transformed the life of the people.

7.3.2 Animal Husbandry

Domesticated animals are the ones bred in captivity for economic purpose with humans having complete control over its breeding, territory and food supply. These animals get incorporated easily into the human society and are owned by them. The concept of ownership actually differentiated herding and finally animal husbandry from hunting. The domesticated animals such as dog, pig, sheep and cattle moved along with their owners as 'livestock'.

The hunter-gatherers again were crucial in the process of animal domestication. While hunting they must have realised that some animals could be tamed, whose young ones attached themselves with human when abandoned. This process was called 'imprinting', i.e. the animals have tendency to follow the first living being during their infancy period. The hunter-gatherers probably selected those animals which helped them in attracting animals to be hunted. Dogs were the first animal to be domesticated. It is still controversial over dog being offspring of wild dog or wolf. Dogs, undoubtedly provided support in hunting during the Upper Palaeolithic and Mesolithic Periods. The domesticated animals must have provided for food in the times of crisis though domestication did not begin in response to food crisis. It was also suggested that the animals in the beginning must have been tamed for ritual sacrifices. All along this process only those animals were domesticated which could be physiologically and psychologically pre-adapted to be tamed without losing their reproductive ability.

Special features of the animals were genetically selected which continue to be used. Animals such as wild sheep have no wool and wild cows produce milk only for their offspring. So, to breed woolly sheep and lactating cow they must have been isolated from their wild population. By isolating species from their larger gene pool produced domesticated versions which provided wool, milk, eggs etc. beneficial for humans. The domestication of animals involved restriction on movement of the selected species, regulating their breeding and controlling their food habits to shape future generation. In previous chapter we have seen how people were selective in their hunting, for example, the Magdalenians in France depended on reindeer and those in southwest Asia concentrated on gazelles and so forth. In this context goats and sheep were the most easily domesticated species as they moved together or follow a dominant member. They also adjusted themselves into human environment and tolerate feeding and breeding in confinement. During hunting most of the time young female and infants of the species must have been spared to provide for food later. They were probably taken to the residential camps where they were caged. These species gradually became dependent on the one who fed them and became partially tamed. As people got more experienced on the benefits of keeping pets, they began experimenting with different other species. Thus, a mutual dependence grew between humans and animals.

Different parts of the world domesticated animals found locally to that region. In Southwest Asia the first species

to be domesticated were goats and sheep. The earliest evidence came from Ganj Dareh in Iranian highlands of managed herd of goats in about 8000 BCE. In the Old World, animals such as wild ox, dog, sheep and goat were most widely available. In the New World, llama, the guinea pig and the turkey were domesticated strictly under special conditions and within confined geographical limits. Domesticating cattle was a daunting task as their prototype *Bos primigenius*, the wild ox, was hunted by Stone Age people. In Andrew Smith's (1992) view well-disciplined wild herds in arid environments were the first domesticated animals as it was easier to control their movements. Southwest Asia and the Sahara provided such dry conditions after about 7,000 BCE leading to early domestication. Animals spending much time out of the range of human environments resisted domestication. Gregarious (herds) animals were the first and most successful with domestication.

Animal Husbandry developed as necessary economic requirement for the people. It helped human with multiple benefits on one hand and on the other animals also benefitted from this process. The changing climates affected the existence of many animal species. Human interference brought genetic changes in them which helped them to survive. Captivity of animals brought genetic changes which increased their productivity and quality. Size of some animals increased while of others decreased. Humans and animals thus shared an interdependent relationship. Initially humans exploited animals for meat, milk, skin, wool and hunting purposes. Gradually they began domesticating other animals such as horse and ox which assisted humans in ploughing and transportation. Basically, it improved the quality of human life by providing certain nutrition to food. Animal foods also acted as supplement to plant foods thus providing continuity in annual food supply. With so many benefits animal husbandry was extremely profitable for humans. But it was not always beneficial. Living with animals brought some diseases to humans. Animal related pathogens entered human systems.

Farming and animal domestication not only brought benefits with them but also different types of problems. Prominently air, water and land borne diseases caused by pests, pollens and animal defecates. With no population control measure, this natural process balanced the nature. The rising population led to many social complexities along with beginning of some initial political control over the resources. Further in time, technology got advanced with need and demands of the rising population. By the end of Neolithic, scholars indicate towards the use of metals, especially copper finally mastering the technique of mixing copper and tin to make bronze. Metallurgical technique and other technological advancements with receptivity of the people to these changes introduced the world to a new era of Bronze Age Civilizations-Mesopotamian, Egyptian, Chinese and Minoan.

Check Your Progress (CYP)-I

A. On the basis of your understanding of the previous sections, answer the following questions in your own words:

Q 1. How did human communities adapt to the changing environmental conditions? Explain.

Q 2. Define the term 'Domestication' with suitable examples.

Q 3. Discuss the process of animal domestication.

B. True or False:

- a) The process of domestication required human intervention and control over these species.
- b) The first crop to be domesticated was barley in the Old World.
- c) Archaeo-botanists have located wild grasses of einkorn in southeastern Turkey as a source of first domesticated wheat crops.
- d) The basic variety of wheats are 'hexaploid' wheats, with six sets of chromosomes.
- e) Dogs were the first animal to be domesticated.

7.4 AGRICULTURE AND ITS IMPACTS

Agriculture brought irreversible changes in the human way of living. The changes were not only confined to plants and animals but many aspects of human life also changed. The way people began to live, eat, interact with neighbourhood, thought process, behaviour etc., all were impacted with the beginning of food production. So, it is important to analyse these impacts to understand fully the magnitude of slow yet revolutionary changes brought about by agriculture.

7.4.1 Changes in Dietary Habits and Rise of Diseases

The immediate impact of beginning of agriculture was change in the dietary pattern of human beings. Earlier meat was basic to the food system but with cultivation, cereals became staple. Different regions specialised in one or the other plant crop-a) Europe and Southwest Asia-wheat, b) South and East Asia-rice, c) America-Maize and

d) Africa-Millet. These cereals and plant crops also became part of trade or exchange wherever surplus was produced. For example, salt became an item of trade in Europe during Neolithic period since it enhanced taste of vegetables. Animals and its products too such as milk, butter etc added to the diet of humans. This wide range of food definitely changed the metabolic system of people thus, changing the body resistance, life-span and way of life. Also, since food began to be well cooked after fired-pottery was invented, plants and meat became more digestible helping the growth of body. The dental and cranial structure also changed by eating softer food. People became more resilient and patient while waiting for seeds to grow and became edible, thus changing their attitude towards life. But, with diversification in food habits certain pathogenic diseases also got transmitted to human bodies which are still to be ascertained clearly. However, diseases such as malaria, measles, smallpox etc began to create havoc, balancing the rapid population growth in a way, since no population control measures were present at the time.

7.4.2 Impact on Settlement Pattern and Human Behaviour

Agriculture impacted the human society immensely. With sedentism and families living closely various social complexities such as control of surplus, personal property disputes, and issues related to kinship, etc emerged. These problems affected the way people began to think and act. Society went into structural change from simple and egalitarian to complex and layered. The society which moved from one region to another with seasonal changes in need of food now settled at one place to cultivate. Sowing, watering, weeding, harvesting, protecting farms from pests, birds and other animal attacks, all necessitated that people settled at one place, that too near their farms. To settle at one place for longer, people needed houses. They also needed sheds and barns for their domesticated animals. Thus, emerged villages with houses made of, sometimes dry-stones, and wattle and daub. During early Neolithic the villages were small in size with small population. Gradually, as population increased the size of villages also expanded

Another impact of agriculture on society was that people began to live together as a group or community supporting and cooperating each other. Individual family system got concretised with emergence of private lands for house and farming. Though people cooperated with each other even during hunting-gathering phase, but it was mostly for shorter period while agriculture needed longer period of cooperation. From one season of harvesting to another, people had to work together for almost round the year. This also necessitated larger number of hands in fields which resulted in bigger family developing kinship system. Even belief system of people shifted towards fertility and procreation since they needed more children and high crop and animal production. Fertility cult got popular and people began to believe in supernatural powers who could help the multiply their material wealth.

7.4.3 Occupational Diversification and Defined Gender Roles

With permanent settlement changes came in occupation as well. During earlier phases hunting, gathering and fishing were the only occupation with same community making required tools. Since groups were mobile, they kept themselves light on necessary things. However, as people settled and family grew, basic requirements increased. From houses to storage to heavy grinding and pounding tools, agricultural tools etc. Men and women got heavily involved in taking care of their individual fields and household and it became difficult for them to do

any other type of work. In this situation diverse groups emerged who involved themselves in herding, weaving, herding, making pottery, agricultural tools etc. In later phase of the Neolithic, occupational groups further diversified into craft artisans, traders, metallurgists etc.

Another consequence of agriculture that society faced was strict division of labour between men and women. Settlement and individual family units required managing house, children, fields etc, as shared responsibility between wife and husband. Since women bore children and was lactating mother, it became her responsibility to stay home and look after them as well as other household chores. Some scholars are of the opinion that it was women who initiated farming and stock-raising since they stayed home and could invest time to look after plants and animals. Probably, what began as some kind of kitchen garden later converted to full-time cultivation on large scale. However, as people settled permanently, they majorly got confined within house, though they did contribute to farming when required. Also, they gathered fruits and vegetables near about their house since they could not leave young children and house alone for long. Men on the other hand took to fields and other occupations which required more physical strength and travelling to far-off regions.

7.4.4 Emergence of Class Structure

Neolithic also, was a phase when society became complex and early stage of class structure emerged. Hunting-gathering society was egalitarian and hunted game was distributed among the community members equally. The chief or leader was one among equals who led the community during clashes and disputes. But, in the Neolithic society the leader of the community became powerful by controlling the surplus and its distribution. Since, society needed to be run smoothly and all kinds of communal work organised properly, a group of elite or sometimes one person became powerful. This chief or leader was invested with both military and religious powers. Archaeological evidences indicate towards the emergence of structured society where group of people formed elite class who managed the affairs of their village. Precious goods found in some of the burials at CatalHoyuk and Abu Hureyra sites indicates towards beginning of some level of inequality. Also, the concept of personal property such as land, farm, produce, tools and domesticated animals, etc appeared among village communities. Evidence of fortification walls around village area- for example stone fortification wall found in Jericho- explains that villages needed security against any kind of attack, either from neighbourhood villages or wild animals or flood etc.

7.5 TECHNOLOGICAL ADVANCEMENTS

Neolithic period was also a phase when many other new inventions occurred, apart from changing gene pools of plants and animals. With settlement and surplus productions, the needs of people diversified. People needed permanent house so they built houses of stones or wattle and daub; for safety from other communities, wild animals etc, they built fortifications; to store surplus grains and milk etc, they invented pottery, at first hand-made n sun dried but later wheel made and fired. People also invented wheel which helped in mobility and travel to long distance for the purpose of trade or procurement of material. By the end of Neolithic, people also learnt the technique of working with metal which became one of the foundations for the emergence of civilisations. In this section we will try to know about these inventions.

7.5.1 Pottery

Hunting-gathering societies were aware of moulding clay by firing but then storage was not greatly required. Storage was done temporarily in tree bark, skin, and sometimes baskets etc. Neolithic began with Pre-pottery phase such as at the site of Netiv Hagdud and the production of pottery began with surplus production. Grains produced had to be stored for longer period and safely. This need of storage led people to invent terracotta pottery. In the early Neolithic phase pots were hand-made and sun dried, since evidence of specialised kilns or furnace have not been found. People invented a way to make durable pots and vessels by adding sand, grasses and wood etc to clay. However, production of pottery was not uniform across all Regions. For example, in China evidences indicate towards people making pottery as early as 18,300 to 13,800 years ago while some farming communities such as those in West Asia and South America were aceramic. In Southwest Asia, pottery was first used around 6000 BCE.

Societies producing pottery, gradually specialised in making pots of different shapes and sizes according to needs and requirements. They also began decorating them with geometric and artistic patterns. These decorated pots and vessels is said to have some ritualistic purpose as those used for cooking and common storage were plain and simple. In the sixth millennium BCE when wheel was invented, potters began to use them for making better shaped vessels. By this time people had also discovered the benefits of firing the pots to make it more durable in which even liquids could be stored safely. Potters had emerged as a specialised occupational class and pottery began to be mass produced due to massive demand for variety of storage purposes.

7.5.2 Polished Stone Tools

The tool technology followed before Neolithic was mainly flaking and chipping the stones. Flint was mostly used since it could be easily flaked by applying pressure or through percussion when it gave sharp edges. However, it had a great disadvantage as this sharp edge were highly brittle and would break with heavy work. Neolithic people understood the flaw and discovered the technique of creating sharp edges by the process of grinding or polishing or both. Human beings also found harder stones such as diorite and granite which could produce best results as tools. However, previous technology of flaking continued alongside the new and more advanced tool-making process. At certain places where raw materials did not occur naturally, finished tools were imported. Polished and heavy ground tools were developed to grind and pound the grains. In the beginning grains were dried in sun, ground with the help of tools such as mortar and pestle and stored for future use. The tools needed to be polished so that stone dust did not mix in the food. Hence, Neolithic people developed this advanced way of making stone tools.

7.5.3 Spinning and Weaving

Evidences such as fishhooks, awls and needles of bones, indicate towards early weaving. India, West Asia, Mesoamerica and Europe etc report of spinning and weaving from the Neolithic period. Woolly sheep and goat were bred in West Asia through the process of cross-breeding or selective breeding which produced wool for spinning and weaving. Gradually, techniques were also developed to weave out of plants like flax and cotton.

7.5.4 Metallurgy

Humans always loved to decorate themselves. Before Neolithic period they wore bones, antlers etc but as they settled and discovered naturally occurring shiny ores and colourful stones, it became desire and obsession. People began to decorate themselves in life and even after death. It gradually became a symbol of status and class. The earliest metal to adorn human body was copper. Native copper was found in abundance in Southwest Asia in between 11th-9th century BCE, where it was used to make tools as well as ornaments such as pendant and rings. The earliest evidence of a perforated pendant was found from the Shanidar caves in Zagros mountains. Early evidences of copper trinkets are also found from Hacilar, Ali Kosh etc. Since the metal was not indigenous to all places where evidences of ornaments have been discovered, it suggests some kind of trade or exchange economy emerging with cultivation during the Neolithic period.

7.5.5 Emergence of Exchange Economy

With settlement and expansion in human needs for agricultural tools, pottery, rare stones and metals, variety of food items and increasing cooperation between communities etc, exchange became crucial. Communities exchanged foods, salt, textiles, pottery, fruits, raw materials and other items with each other to fulfil their needs. One of the most important products of exchange was obsidian and flint during the Neolithic period. Tools made of obsidian and flint has been found from different Neolithic sites such as Jarmo and CatalHoyuk. Before wheel was invented, people either walked or used boats to cross rivers. This barter or exchange not only helped in material exchange but also ideas which contributed to the further development of social ties and diffusion of various inventions between Neolithic cultures.

Check Your Progress (CYP)-II

On the basis of your understanding of the previous sections, answer the following questions in your own words:

Q 1. Trace the changes brought about in dietary habits of human beings during Neolithic period.

Q 2. How did agriculture impact settlement patterns?

Q 3. Briefly discuss the development of polished stone tools and its importance.

7.6 LET US SUM UP

Farming and animal domestication not only brought benefits with them but also different types of problems. Prominently air, water and land borne diseases caused by pests, pollens and animal defecates. With no population control measure, this natural process balanced the nature. The rising population led to many social complexities along with beginning of some initial political control over the resources. Further in time, technology got advanced with needs and demands of the rising population. They began making pottery to store surplus food that they acquired for lean period. They also began making clothes out of animal skin, cotton or flax seeds. Wheel was invented around 6,000 BCE which enhanced pottery making technique and gradually transportation easier and faster when used with bullocks or horses. By the end of Neolithic, scholars indicate towards the use of metals, especially copper finally mastering the technique of mixing copper and tin to make bronze. Metallurgical technique and other technological advancements with receptivity of the people to these changes introduced the world to a new era of Bronze Age Civilizations-Mesopotamian, Egyptian, Chinese and Minoan.

7.7 GLOSSARY

Neo-thermal environmental conditions: Fluctuations in Climate from warm to cold and dry to humid.

Broad-Spectrum Economy: It consists of intensive and specialised hunting, fishing, seasonal gathering and fowling etc.

Spikes: It is also called 'flower stalks' or sharp and pointed projection on stems or leaves for protection.

Hybridisation: Process of interbreeding two different species of plant or animal.

Imprinting: Young animals following human being as a habit and trust.

Aceramic: Societies which did not produce pottery.

7.8 EXAMINATION ORIENTED QUESTIONS

Short Questions

1. Which crops were the first to be domesticated and how?
2. Trace the emergence of class structure during Neolithic period.
3. Give reasons for occupational diversification among Neolithic cultures.

4. Why did material exchange become important among communities.

Long Questions

1. Define 'imprinting'. Describe the process of animal domestication during Neolithic period.
2. Discuss plant domestication with the help of suitable example.
3. Write an essay on agriculture and its impacts on human society.
4. Explain technological advancements in the Neolithic period with appropriate examples.

7.9 LESSON END EXERCISES

1. Evaluate the importance of plant and animal domestication on human evolution.
2. Trace the role of exchange in Neolithic economy.
3. Discuss the emergence of pottery and its importance in the farming society.
4. Explain the relationship between dietary habits and rise of diseases among humans in the Neolithic period.

7.10 ANSWER KEY

CYP-I

- Q 1. See sub-section 7.2.1
- Q 2. See Section 7.3
- Q 3. See Section 7.3.2

True or False:

- a) True, b) False, c) True, d) False, e) True

CYP-II

- Q 1. See Section 7.4.1
- Q 2. See Section 7.4.2
- Q 3. See Section 7.5.1

7.11 SUGGESTED READINGS

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STAGE OF FOOD PRODUCTION

SEMESTER-I

COURSE NO. HIST104

UNIT-II

LESSON 8

DEBATE ABOUT THE NEOLITHIC REVOLUTION

STRUCTURE

- 8.0 Learning Objectives and Outcomes**
- 8.1 Introduction**
- 8.2 Concept and Debate About Neolithic Revolution**
 - 8.2.1 Impact of Neolithic Revolution**
- 8.3 Theories on the Beginning of Agriculture**
 - 8.3.1 The Oasis Theory or Climatic Stress Model**
 - 8.3.2 Multivariate Theories**
 - 8.3.2.1 'Push' or Demographic Model**
 - 8.3.2.2 'Pull' Theory**
 - 8.3.2.3 'Culture' Theory**
 - 8.3.2.4 'Social' Theory**
- 8.4 Let us sum up**
- 8.5 Glossary**
- 8.6 Examination Oriented Questions**
- 8.7 Lesson End Exercises**
- 8.8 Answer Key**
- 8.9 Suggested Readings**

8.0 LEARNING OBJECTIVES AND OUTCOMES

Learning Objectives

The objective of this lesson is to enable you to:

- Critically analyse Neolithic Revolution and understand its concept.
- Discuss importance of climate change bringing Neolithic Revolution.
- Understand the debate around Neolithic Revolution.
- Trace reasons behind adaptation of sedentary farming economy.

Learning Outcomes

After going through the lesson, you will have a clear understanding of:

- Transition from hunting-gathering to agriculture.
- Concept of Neolithic Revolution or 'Agricultural Revolution'.
- Theoretical perspective of V. Gordon Childe's views, its criticism and the debate surrounding it.
- Impacts of Neolithic revolution on society, health and technology.
- Other debates on the origins of food production and their critical analyses.

8.1 INTRODUCTION

Dear learners, the most revolutionary development brought about by the *Homo* species on earth was domestication of plants and animals. The subsistence economies based on scavenging, hunting, gathering and fishing through two million years was replaced by cultivation of plants and animal domestication. It is within a few thousand years, between 10,000 and 3,500 years ago, that cultivation began and spread across the globe, probably without any connection. Two interesting facts were observed by scholars regarding this extraordinary change: firstly, the succeeding civilizations world over based itself on one or more of only six types of plants-wheat, rice, maize, barley, millet and potatoes. Not that other plants were not important or calories provided through animal domestication any less significant, but all the civilizations were driven by these six plant genera. Also, among the domesticated animals majorly the entire world is dependent on just five animals- sheep, pig, goat, cattle and later horse. These animals are economically important whereas dogs are more for personal reasons. Secondly, the revolutionising change brought by agriculture was rapid, widespread and irreversible and emerged independently at about same time in different regions of the world. These observations raised many questions about time, space, societies involved, needs and requirements of the societies, climatic changes, and so forth. Scholars identified three basic factors behind origins of agriculture: climatic changes, increase in population and advanced technologies. However, there were other factors too as suggested by various scholars which propelled the societies into food production economy.

8.2 CONCEPT AND DEBATE ABOUT NEOLITHIC REVOLUTION

'Neolithic' term was coined by John Lubbock in 1865 to differentiate it from Old Stone Age. This term derived from two Greek words- 'neo' meaning new and 'lithos' meaning stone. The context of this term till twentieth century was the new and ground and polished stone tools. But later it was seen that the period represented many more developments in the life and society of hunter-gatherers than only polished tools. Apart from domestication of plants and animals and total dependence on farming, there was increase in population and size of settlements, use of pottery, weaving, and greater social and cultural interactions which was later followed by the growth of civilization in most societies of the world.

V. Gordon Childe (1936), used the term 'Neolithic Revolution' for the first time in his book, *Man Makes Himself*. His framing of the term was in the context of the wide scale changes that came about in the human society after agriculture was adapted. His idea was to highlight the revolutionary significance of the agriculture worldwide. During early Holocene when there was acute climatic crisis, humans became partners with the nature to survive rather being totally depending on the nature. In this process people began food production, breeding and selecting species of animals, which brought economic revolution, greatest after mastery over fire in human history. The changes in subsistence pattern, permanent settlement, forming village networks, inter and intra-community exchanges, demographic increase, making of pottery and weaving and large-scale food production bringing food security was a great leap for humanity, hence it was revolutionary. Also, since this transition from hunting-gathering to cultivation brought rise of civilisation and led to the exchange of material products between different settled societies, something which was beyond their comprehension, it constituted rightfully the title of Neolithic Revolution.

His proposal however drew criticism from different scholars on the basis that climatic changes were neither sudden nor drastic. Also, Child's proposal lacked adequate archaeological and environmental data. Grahame Clark (1977) contested the revolutionary aspect of the Neolithic. According to him, Mesolithic period acted as bridge between Palaeolithic and Neolithic which brought major changes. The development in the plant, animal and human relationship had already been achieved by the Mesolithic people. It was a slow and gradual change over the time and not a sudden change, hence not a revolution. However, the changes that occurred were revolutionary in nature in the times to follow. Glyn Daniel (1968), earlier had already disposed off the idea of revolution. For him food production was just a small part of evolution and was not a revolutionary change.

In response to these criticisms, Childe clarified his notion of revolution as not being a sudden change but the monumental change it brought in the socio-economic conditions of the people. Now the surplus could be stored by the societies to use in different ways. It could be used during crisis, or to support large population or to exchange. Modifying his earlier views, he agreed on the evolutionary character of food production rather revolutionary. Also, food production was a gradual process and not uniform across the continents. Analysing the term 'Neolithic revolution' or also called 'agricultural revolution' in totality might give us the sense behind Childe's proposal. Revolution basically signify small quantitative changes resulting into a huge and rapid qualitative change. Neolithic revolution term probably was in the light of the view that the rate of progress in the preceding millions

of years was extremely slow while food production happened with lightning speed between 9000-6000 BCE, i.e. only within 3000 years. It also happened almost in all parts of the world simultaneously and was adapted as the dominant mode of production. Another aspect was the enormity of the changes it brought from which humans never returned to hunting-gathering. The changes brought in the human lives in comparatively short period of time probably compensated the term 'revolution' in context of the Neolithic.

8.2.1 Impact of Neolithic Revolution

To provide a clear picture of the 'Neolithic Revolution', impact of its components such as agricultural transition, or plant and animal domestication, on socio-political, health and technological life of human being needs to be analysed. Neolithic revolution propelled the production of food by the farmers creating surplus which led to more stable economy and emergence of non-food producing groups for the first time in the history of human evolution. It forced the people to settle at one place. The sedentary life made raising more children easier since large population hindered frequent mobility. Large population and surplus production needed proper management through a new kind of leadership which was not required in a more egalitarian nomadic society. This new kind of need led to the emergence of small elite class who controlled and managed the surplus and its distribution in their community. Therefore, we see agriculture ushered in the development of social classes and social complexity. Some of these group or class later specialised in non-food producing groups such as manufacturers, traders, artisans etc. one of the most important developments fuelled by Neolithic revolution was the emergence of towns and cities converging into civilisation.

Another consequence of Neolithic revolution was emergence various kinds of diseases and epidemics which could be water-borne, air-borne or those that infected humans, animals and plants. Densely populated societies living in close proximity of domesticated animals having mostly poor hygienic conditions led to the rise of zoonotic diseases such as smallpox, influenza, and cholera. These diseases were new to humans and spread rapidly with human contact. Since people moved to different regions for trade, material procurement, and other needs, they took these diseases with them, thus contracting other communities. However, communities with such diseases gradually developed immunity.

Technological advancement was another consequence of Neolithic revolution. With large population being engaged in cultivation, demand for larger number of agricultural tools and of better quality arose. Since there was contact among communities, they could easily exchange their innovations. This led to rapid systematic development of tools and weapons. These tools and weapons also helped communities in digging canals, building defence walls around their village settlements, constructing houses, protecting themselves from wild animals and so on. In the beginning land would be left fallow for nutrient replenishment in the soil but in the later phase of the Neolithic period technique to replenish soil was invented through nitrogen fixating plants as peas. Farming communities developed crop rotation system for better production and also natural fertilising technique through birds' droppings etc. Millions of years of experience living with plants and animals enabled people to identify potentially viable species which could be domesticated. With time they began to select plants and animals for breeding and cross-breeding. Through this process people began to produce better quality of domesticated plants and animals,

which were more disease resistant, strong and more beneficial for humans as food as well as for economic exchange.

Looking at the fact that very few food crops and animals were chosen for domestication, and also this happened across the world almost about same time, is surprising. It suggests either these plants and animals had something special to offer or they were discovered coincidentally in time and space. Also, the question arises, why did people shift to a food system which brought range of diseases? Probably, agriculture must have produced tremendous effect on peoples' life which made them to continue it as permanent way of economy. Human beings became controller of the nature eradicating many species, domesticating some, inventing new technologies, mastering the survival from diseases and vagaries of nature. Overall, scholars agree to the fact that the process of domestication brought unimaginable changes in plant and animal species as well as human themselves, thus changing the entire way of living and it is this massive change that we understand as the 'Neolithic Revolution'.

Check your Progress (CYP)-I

A. On the basis of your understanding of the previous sections, answer the following questions in your own words:

Q 1. Why did cultivation begin and spread across the globe rapidly? Discuss.

Q 2. Explain the concept of Neolithic Revolution.

Q 3. Discuss the impacts of Neolithic Revolution on society.

B. Fill in the blanks:

1. propounded the term 'Neolithic'.
2. V. Gordon Childe used the term 'Neolithic Revolution' for the first time in his book,
3.contested the revolutionary aspect of the Neolithic.
4.acted as bridge between Palaeolithic and Neolithic which brought major changes.
5. Wheat and are supposed to be the earliest cereal crops.

8.3 THEORIES ON THE BEGINNING OF AGRICULTURE

Human cultural activities had evolved so much to culminate into domestication of plants and animals. The genius of human mind now had understood its environment to some extent and knew how to adapt it. People had also devised ways to generate continuous supply of food. Interaction with their environment through thousands of years, human began to modify and control it. People began to systematically modify plant and animal environments to increase their productivity. The initial understanding on the origin of agriculture by some individual or happening one fine day has been shattered by many researches through time. Many features such as localization, technological advancement, greater sedentism and abundant and variable food resources had developed in the Mesolithic stage. The Natufian culture had adapted to cultivation of wild cereal grains too. So, the question arises, what really caused to the beginning of agriculture and when did this realisation occurred?

8.3.1 The Oasis Theory or Climatic Stress Model

V. Gordon Childe (1928), an Australian archaeologist, was first to attempt to study the causing factor of the transition to food production. His region of study was the Fertile Crescent (Southwest Asia), where global warming and desiccation began by the end of the Pleistocene era. The rain-bearing clouds moved northwards from this region. This led to the shrinking of water bodies and forming desert oases in some regions. Since water is crucial for survival of living being, humans, plants and animals began concentrating around them. Living in limited areas all living being had to interdepend on each other and humans being more intelligent began controlling them. Also, desiccation led to some scarcity in food resources and humans under this stress began searching for new ways to fight this situation. It is in this time of crisis that need arose for animal domestication and farming.

The 'Oasis theory' basically suggested that the socio-economic changes such as agriculture happened in a small area and not on worldwide scale. It is in this restricted area that experiment completed and then in time spread to other parts of the world. The fact that climatic changes happened and had role to play in the origins of agriculture was accepted by most scholars but, a widespread desiccation of Southwest Asia is not clear. Also, it was found that the wild ancestors of wheat and barley supposed to have been domesticated around the oases had begun to be domesticated before the formation of deserts and oases. In recent researches some scholars have even

suggested that desiccation forced people to move in the Nile Valley from the Oases, where they began farming wheat and barley earlier domesticated in Southwest Asia. The question here arose that there were many periods of climatic change earlier too, but that did not lead to domestication. So, what conditions emerged now that agriculture began? Question also arose that domestication happened across globe in different climates and in many different crops? And hence, climate change could not be the sole reason of this worldwide phenomenon.

Robert Braidwood, in early 1950s, challenged the 'oasis theory' on the pretext of lack of evidence on intense desiccation in northern Mesopotamia, the Iraq region. He argued for change in economy due to continuous change in cultural differentiation and specialization of human societies. (Fagan & Durrani, 2016 [14th Ed.]: 323). He took a multidisciplinary approach towards his research and excavated the site of Jarmo, in northern Iraq. According to Braidwood, Jarmo was an agricultural settlement dated to about 6,500 B.C.E. This was supposed to be much before any other place where agriculture began. He based his explanation on human behaviour and argued for gradual evolution towards food production. For he came up with the idea of 'nuclear zones' i.e. areas with abundance of floral and faunal species. He further included the areas of Taurus and Zagros mountains, rich in large variety of plants and animals to subsist on. As people came in close contact with these, they began controlling and manipulating them. Also going through the long process of cultural evolution, people were now ready to receive the change coming by domesticating plants and animals. Thus, the environmental conditions and changes in human receptivity brought about this transition to agriculture. The advantages of domestication must have been so attractive for the people that it became the dominant mode of subsistence strategy.

Carl Sauer (1952) and later Robert McC Adams (1966), suggested fishermen to be the early agriculturists. According to them fishermen led to greater sedentism around rivers, lakes and ponds. After fishing, in their leisure time they would exploit the plants in the vicinity. Gradually the fishing-gathering strategy advanced. With intensive fishing, more advanced equipments were required and people began growing starch foods for making toughening fishing nets which could be water resistant also. In this context people began growing root crops first. For Sauer and Adams, food production was not the basic idea of cultivation but it was in support of fishing. This 'water-source-centred model', however was difficult to archaeologically prove. Apart from some evidence of it in Southeast Asia, in no other region cultivation of root crops precedes cereal production.

From about 1968, more theories came to fore as new researches were happening and many fresh sites were being excavated globally. One aspect was clear that environmental changes had affected different parts of world differently. Also, the proposal that Southwest Asia was climatically the most affected area during Holocene was also questioned. Focus of the scholars shifted from only climatic change to other factors such as population pressure and social changes due to greater sedentism. Barbara Stark (1986) after her extensive study of the factors in the New World, categorised modern theories into three: 'Push', 'Pull' and 'Social' models.

8.3.2 Multivariate Theories

From 1960's debate around origins of food production took a more complex study where scholars began to mix various ideas along with bit of climatic changes, putting forward a theory called the 'Multivariate theory'. However,

at one point all these scholars agreed was that the Mesolithic hunting-gathering societies had become complex and well adapted to food production before some people began to plant wild cereal grasses and domesticate animals.

8.3.2.1 'Push' or Demographic Model

Lewis Binford (1968) proposed the 'Push' theory with the idea that before agriculture began, hunting-gathering societies lived in equilibrium with their environments exploiting animals and plants naturally without altering their nature, which is not the case with domestication. This was also called 'stress' model or 'Edge-Zone' model which focussed on the imbalance created between resources and population. His thrust was more on the stress caused by population increase rather than environmental pressure. In Binford's view, the population probably increased in the optimal areas (areas rich in resources) such as coastal areas where people's reliance on rich marine resources grew, leading to population increase. The carrying-capacity of the land became insufficient due to population increase. This increase in population could be controlled either by some birth control measure or by budding-off (the primary way of population-size control which involved splitting up off the bands when the size increased to certain number and resources decreased). In budding-off groups divided and moved from optimal areas to the peripheral or the marginal areas (inland areas) occupied by less sedentary groups. The stress caused by the spill over populations in the marginal areas was relieved by artificially increasing the resource base through agriculture and domestication of animals. The groups settled in marginal zones through generations, interacted with their native habitats culminating into domestication of plants and animals. Hence, for Binford, the demographic tension led to agriculture.

Binford's hypothesis, however was not supported by the evidences. In Southwest Asia most of the earliest agricultural societies such as those in Negev Desert, possibly cannot be imagined to have 'population pressure'. Also, there was hardly any evidence of large-scale migration of people inland during late Pleistocene. However, we cannot deny the importance of this theory as a causal factor of the origins of agriculture.

David Harris (1969) also agreed upon an imbalance between population and resources as the factor for origin of agriculture. But for him population did not outgrow resources and the situation occurred due to the shifts in the environment. The mobility of the foragers was affected due to environmental changes and hence it led to sedentism and population stress. People settled in the areas rich in resources which he referred to as transitional zones between forest and steppe, savanna, river or coast or on the margins of lowland and upland. These transitional zones had an ecosystem which was rich in plants and animals and the foragers could exploit a 'broad-spectrum' economy. This hypothesis however, could not explain the origin of agriculture in different parts of the world at almost the same time.

8.3.2.2 'Pull' Theory

The 'Pull' theory originated with the idea of having some attractive characteristics in certain plants and animals on which people relied more and gradually became dependent on them. Scholars believed this reliance must have led to so much dependency on them that they could not go back to previous patterns and ultimately began

domesticating them. In consequence to this growth in food production, population increased. Kent Flannery in 1968, argued on this hypothesis while working with the foragers of upland Mesoamerica, who exploited plant and animal within a strictly scheduled seasonal pattern. Gradually as mild genetic changes came in beans and maize, it became more attractive to the foraging bands. They began spending more time collecting them, ultimately upsetting the strict seasonal schedule. After investing much time on collecting the plants, they were left with no choice than to maintain the supply and thus, began cultivating them.

Donald Henry (1989) looked at the Near East and proposed the 'Pull' theory. He suggested two crucial periods of climatic changes which brought about the origins of agriculture. First was around 10,500 years ago when the global temperature rose which led to sedentism and 'complex' foraging from the earlier 'simple' foraging. During this phase the wild cereals and other high yielding plants were exploited which supported the population growth. Second climatic change came about 8,500 years ago, leading to the collapse of complex hunting-gathering economy and people were left with two options, depending on their place of settlement. They began cultivating in the regions of high-productivity and population such as Levant. On the other hand, in the marginal areas they reverted back to foraging system.

8.3.2.3 'Culture' Theory

Kent Flannery (1968) also used 'systems' theory to explain the beginning of agriculture both in the Zagros Mountains and the southern uplands of Mexico. He suggested that the seasonal movement of the foragers brought great experience of flora and fauna to them across different eco-zones. The principle of 'negative feedback', i.e. a principle functioning in nature in which different plants in different areas ripened at different times, led to scheduling of movement by hunter-gatherers accordingly. The size and movement of people depended on the availability of plants and animals and thus their economy was based on 'broad-spectrum'. This situation occurred in the southern upland of Mexico according to him. On the other hand, it was also possible that the people attempted to expand the area of certain plant which had tendency to outgrow other plants, for example, wheat in the Zagros Mountains and maize in upland Mexico. These types of plants disturbed the natural equilibrium and provided 'positive feedback', i.e. they could be grown in different times of the year. Along with hybridization and other plants such as beans, squash etc, maize could be procured year-round and even in the areas where it wasn't found earlier. With time the movement of the people got restricted due to food production and sedentism changing the pattern of subsistence. Scholars like Colin Renfrew (1973) also accepted the systems theory as a way of explaining the culture change for transition to agriculture.

Another important view comes from Mark N. Cohen (1977), where he focuses on the human response and not environmental change as a crucial factor for the origins of agriculture. He was of the idea that the hunting-gathering societies by about 10,000 years ago had exhausted all possible economic strategies to increase food supply for the rapidly increasing population within the existing subsistence pattern. It is within these situations that people had to find some artificial ways to augment food supply and thus farming began. Cohen, relating to Ester Boserup's (1965), contention that the population increase contributed to intensive cultivation, agreed that intensive agriculture could be practised only by large population and so farming did not begin in need of food but due to

increasing population. It took place in limited areas where population-resource imbalances such as long drought cycles, floods, long cold winters etc., occurred. It is to be remembered that domesticated plants and animals were easily affected by the vagaries of climate such as irregular rainfall, attacks by insects, plant and animal diseases etc. The societies responded to these risks by developing technologies like storage to preserve food for longer period to be used during seasonal risk periods. Also, a long-lasting solution to any shortage of food for rising population and fight other risk factors could be to produce food by cultivating plants and domesticating animals.

The theory however was problematic, as assessing density of population in ancient times with precision was difficult even by using archaeological data. Collecting all data from various sites and then reconstructing the changes in a short period of time was not simple. So, population increase and archaeological data were only speculative and did not clearly establish the relationship with beginning of agriculture.

8.3.2.4 'Social' Theory

While 'Push' and 'Pull' theories were still under analysis Brian Hayden (1995), came up with another explanation on origins of agriculture and called it 'Social' theory. Dissatisfied with earlier causal relationships between climate, resource deterioration and population pressure etc. he suggested social behaviours such as prestige, trade and competition as the cause of transition to agriculture. The hypothesis of this theory revolved around increase in food resources to meet the demands of the society for different community activities such as trade, social bonding, feasting and marriage gifts etc. The social groups depended on some high productivity animals for these purposes and gradually began to domesticate them. For plant cultivation Hayden (1992), in his article "Models of domestication" published in Gebauer and Price, ed. *Transitions to agriculture in prehistory*, proposed the idea of competitive feasting which occurred in resource-rich regions. Due to abundance in resource, people did not have to share food as in the resource deficient areas. Here some individuals became ambitious to organise feast in order to control labour and loyalty of people. The need to arrange for large amount of food for such feasts led to cultivation. This type of competitive feasting was seen in many societies according to ethnographers. Cultivation for the foragers was not difficult to discover as they were well acquainted with their natural environment. His theory however, did not take into account any particular geographical region and so can be applied to both Old and New Worlds. Runnels and van Andel (1988), too argued for surplus production for trade or to support artisans. (Bogucki, 2000).

Barbara Bender (1985), before Hayden had argued for social factors. She was of the opinion that populations did not grow in isolation. Factors such as the level of technology, the subsistence type, the pattern of distribution and exchange, political alliances between neighbouring groups etc., affect the demographic levels. So, people changed their adaptive strategies and way of food procurement only when there was change in social relations. Her focus was on extensive trade and development in the sense of ethnic identity and status differentiation through burials and other goods. This cultural growth stimulated intensified production and ways of exchange which affected the transition to agriculture.

The problem however with her theory was that she did not take environmental factor into consideration which was definitely a key aspect in the origins of agriculture. Also, societies are integrated functional groups in which causes and effects of the changes cannot be clearly explained.

This research is an ongoing process as none of the theories give a complete view of the causal factor of the origins of agriculture. The given theories did not link to actual field data and it was not easy to document them. In recent times scholars have come to a consensus that single-factor stress models cannot be explained singularly and have to be understood in context of human decisions and choices. These vast number of studies and researches however, indicate the impact of agriculture on human life and environment.

Check Your Progress (CYP)-II

A. On the basis of your understanding of the previous sections, answer the following questions in your own words:

Q 1. Describe Climatic Stress Model proposed by V. Gordon Childe.

Q 2. Explain the role of environment in the beginning of food production in Fertile Crescent.

Q 3. Discuss 'Social' theory.

B. Multiple Choice Questions

1. 'Oasis Theory' was propounded by
 - (a) Gordon Childe
 - (b) Robert Braidwood
 - (c) Robert McC Adams
 - (d) Carl Sauer
2. Which crop was domesticated first?
 - (a) Barley
 - (b) Millet
 - (c) Maize
 - (d) Wheat
3. 'Edge-Zone' model was propounded by
 - (a) V. Gordon Childe
 - (b) Kent Flannery
 - (c) Lewis Binford
 - (d) Donald Henry
4. 'Social' theory was proposed by
 - (a) Barbara Bender
 - (b) Brian Hayden
 - (c) Kent Flannery
 - (d) Mark N. Cohen
5. 'Oasis theory' was challenged by
 - (a) Robert Braidwood
 - (b) David Harris
 - (c) Carl Sauer
 - (d) Robert McC Adams

8.4 LET US SUM UP

Origin of agriculture and animal domestication emerged in different time and space across the globe. One of the earliest studies on the Neolithic period was done by V. Gordon Childe who proposed the term 'Neolithic Revolution' for the kind of magnanimous and non-reversible changes that came about in this phase. People settled permanently forming villages, began domesticating plants and animals bringing genetic changes in them, dietary habits changed, new diseases emerged, tool technology advanced, pottery began to be made for storage, and finally by the end of Neolithic people began working with metal such as copper. Apart from debate on Neolithic Revolution, various other origin theories such as Climatic Stress Theory, Demographic Modal, Social Theories, were proposed by Scholars. These theories on origin have been critiqued by various Scholars and multiple suggestions and opinions have been given. However, they uniformly believe that agriculture originated in Southwest Asia around 10,000 BCE, closely followed by other regions of the world. Wheat and barley are supposed to be the earliest cereal crops while sheep, goat, dog and pigs were supposedly earliest animals to be domesticated. Domestication of both plants and animals brought genetic changes in their wild varieties. With time plants and animals provided all necessary nutrients to human diet supplementing each other. People settled permanently in villages near around water bodies since they got continuous food supply and water. Thus, providing the much-needed foundation for the beginning of civilisations.

8.5 GLOSSARY

Fertile Crescent: This constitutes of Southwest Asian region where farming first began between the rivers Tigris and Euphratus forming one of the most fertile regions in a crescent shape.

Pleistocene Age: This is a geological period also called 'Ice Age' spanning between 2.5 million to 11,500 years ago.

Broad spectrum economy: An economy in which variety of plant and animal species could be exploited through farming and herding.

Rachis: The joint area of leaves to petiole.

8.6 EXAMINATION ORIENTED QUESTIONS

Short Questions

- Q1. Discuss the theoretical perspective of V. Gordon Childe on Neolithic Revolution.
- Q2. How did Demographic factor lead to the origins of agriculture?
- Q3. Discuss 'Negative Feedback' and 'Positive Feedback.'
- Q4. Discuss 'Oasis' theory.

Long Questions

- Q1. Critically analyse the term 'Neolithic Revolution'. Discuss its impact on society.

- Q2. Discuss the relative importance of ecological and cultural factors in the origins of agriculture.
- Q3. Critically examine the various factors that led to the origins of food production.
- Q4. There can be no mono-causal explanation for the beginnings of food production'. In the context of this statement, analyse the relevant theories and debates.
- Q5. Critically analyse 'Push' and 'Pull' theories in relation to origin of food production.

8.7 LESSON END EXERCISES

- Q 1. Critically analyse the 'Oasis theory'.
- Q 2. Discuss 'Push' or Demographic model in detail.
- Q 3. Differentiate between 'Push' and 'Pull' theories.
- Q 4. Explain Cultural theory with special reference to 'Negative feedback' and 'Positive feedback'.

8.8 ANSWER KEY

CYP-I

- Q 1. See Introduction
- Q 2. See Section 8.2
- Q 3. See Section 8.2.1

Fill in the blanks:

1. John Lubbock
2. *Man Makes Himself*
3. Grahame Clark
4. Mesolithic period
5. Barley

CYP-II

- Q1. See Section 8.3.1
- Q2. See Section 8.3.1
- Q3. See Section 8.3.5

Multiple Choice Questions

1. (a) 2. (d) 3. (c) 4. (b) 5. (a)

8.9 SUGGESTED READINGS

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STAGE OF FOOD PRODUCTION

SEMESTER-I

COURSE NO. HIST104

UNIT-II

LESSON 9

BRONZE AGE CIVILISATIONS: ECONOMY AND STATE STRUCTURE

STRUCTURE

- 9.0 Learning Objectives and Outcomes**
- 9.1 Introduction**
 - 9.1.1 Civilization and Culture**
 - 9.1.2 Urbanism**
 - 9.1.3 ‘Bronze Age’**
 - 9.1.4 The ‘Urban Revolution’**
- 9.2 Beginning of Civilization**
 - 9.2.1 Geographical Settings and Environment**
 - 9.2.1.1 Egypt**
 - 9.2.1.2 Mesopotamia**
- 9.3 State Structure**
 - 9.3.1 State Formation in Egypt**
 - 9.3.2 Mesopotamian Political Structure**
- 9.4 Economy**
 - 9.4.1 Rise of Urban Centres in Egypt**
 - 9.4.2 Trade and Economy in Mesopotamia**
- 9.5 Let us sum up**
- 9.6 Glossary**
- 9.7 Examination Oriented Questions**

9.8 Lesson End Exercises

9.9 Answer Key

9.10 Suggested Readings

9.0 LEARNING OBJECTIVES AND OUTCOMES

Learning Objectives

The objective of this lesson is to enable you to:

- Understand the terms such as ‘Bronze Age’, ‘Civilization’, ‘Urban Revolution’ etc
- Establish the relation between Bronze Age and the concept of Civilization
- Explain the role of environment in the emergence of Civilization
- Critically analyse the causes of the beginning of Civilization
- Examine the economy and state structure of various Ancient Civilizations

Learning Outcomes

After going through the lesson, you will develop a clear understanding of:

- Concepts such as Civilization, Bronze Age, Culture, Urbanism
- Metallurgy and its role in the beginning of Civilization
- The importance of Geographical setting and environment in the emergence of Civilization
- Economy and process of state formation
- The development of urban settlement and complex society

9.1 INTRODUCTION

Dear learners, E.B. Taylor in 1871, suggested uniformity in the pattern of growth of human Institutions. He was also of the opinion that ‘uniform action of uniform causes’ led to the emergence of similarity in cultures even though situated distance apart and being ethnically different. L.H. Morgan in his publication *Ancient Society*, followed similar lines and suggested existence of ‘germs’ of main institutions of society in early stages of development which became the precedence of uniformity in the development of the world.

The civilizations almost uniformly constituted organisational complexity and cultural sophistication in the societies beyond the chiefdoms. Archaeologists have comprehended variety of concepts such as ‘civilization’ and ‘urbanism’. These concepts are overlapping and complementary and needs to be looked at to understand the developments. Another term ‘complex society’ has also been much debated but scholars are of the opinion now that all the

societies beginning from the Pleistocene bands were complex in one or other manner and thus presently it is redundant to focus on it exclusively for the Civilizations.

9.1.1 Civilization and Culture

The term civilization familiarises us with 'civility' i.e a measure of decency in the behaviour of the individual. But scholars take this definition to be ethnocentric as 'civilized' behaviour in one civilization might be uncivilized or barbaric for the other. The term 'civilization' originated from the Latin word *civilis* (civil), often related to *civis* (citizen) and *civitas* (city). These terms pointed towards progress in human society. This term 'progress' again points towards value judgement differentiating between more advanced and less advanced societies suggesting that 'low' cultures generally adopt the developments of the 'high' cultures.

Archaeologists define this term in context of urbanised and state-level societies. However, since civilization is a term related to culture, historians have tried to assign cultural attributes of societies to establish if the societies belong to the category of civilization or not. The Old-World Civilizations are also called the preindustrial civilizations sometimes. The criteria formulated was based on usage of manual labour and not fossil fuels such as coal, natural gas etc. V. Gordon Childe in early 1950s identified some common characteristics of these preindustrial civilizations: a) societies based on cities, high density of population and large territory, having large and very complex social organisation. Decline in the importance of kinship relationship; b) People involved in artistic expression and craft specialisation; c) economies in which capital is accumulated by a centralised agency and social status defined through tribute and taxes; d) societies which maintained records, made advances towards the development of science and mathematics. It developed some kind of writing system; e) establishment of a ruling class; f) they had huge public buildings and monumental palaces; g) non-agricultural specialists and communities involved in trade for valuable articles; h) a state religion accepted by the ruler and embraced by the people of the same mostly.

'Culture' on the contrary is viewed by the anthropologists as the distinctive adaptive system used by human beings (Fagan, 2004). Archaeologically, it is suggestive of a pattern of life of a society that includes the traditional systems of, social relations, food habits, belief and behaviour and language etc. The types of houses, clothing, common beliefs, pottery and so on, also make a part of culture. Language is one of the most important features of culture which helps communities in transmitting the experiences and ideas, thus spreading one's culture generations after generations. According to Childe (1942) 'Archaeology is liable to become a study of cultures rather on of culture.'

Though many times the terms 'civilization' and 'culture' are interchanged but difference can be established. Some characteristics such as trade, craft specialisation and wealth accumulation were related even with the trans-egalitarian societies which were not considered civilizations. It is also difficult to recognise and document some of the other features such as predictive science. Some features such as ruling class and artistic expression are vague concepts and their roots have been found deep in prehistory. Finally, writing system, the most important feature was not found in some civilizations as they were not literate. Despite some similarities, 'civilization' can be seen as a more complex and sophisticated cultural patterns with urban lifeways, social stratifications, scripts, well developed

belief systems, and with state control to certain extent. Geographically it is spread in vast region with uniformity in material basis in wider context and differentiation on the regional level. The communities interdepend in material as well as cultural context across the civilization.

Archaeologists focus on urbanism and state as major feature of civilization. It is however difficult to comprehend that all civilizations were urban and if early urban societies were truly state. Thus, definition of civilization in its totality is elusive and has to be seen in certain context and perspective.

9.1.2 Urbanism

Archaeologists look at urbanism as having cities which are functionally varied and more than being a simple agglomeration of people. The earliest cities were of many forms such as being a compact walled settlement as in Mesopotamia, or ceremonial centre of Mesoamerica. Archaeologists have attempted to give a generalised definition of a 'city' which overlaps with the criteria for civilizations as mentioned above. George Erdosy (1988) opines that the cities contain the institutions required for the maintenance of increasingly complex and inequalitarian societies. Conningham (1995) supported the criteria suggested by Childe for civilization except for excluding defenses, craft specialisation and long-distance trade from the definition since these existed in antecedent and in non-urban societies across the globe. Writing system too here complicates the situation as it would eliminate the later Andean civilizations where magnificent cities like Cuzco was built.

A city has larger and denser population than that of town or village. A large city consisted of minimum 5,000 people. But number is not a sufficient determinant as it does not explain the diversity of population, economic and organisational complexity of a city. A small area can also possess huge population but might not have the diversity. Population size and density along with organisational complexity can be distinguished as the city, different from other settlement types.

City has also been characterised with the presence of the state. State can be defined as a political unit governed by a central authority whose power belongs beyond the kinship bonds. The ruling elite gets power from new source based on allegiance reducing the power of kinship ties, though not disappearing completely. Recent researches and fieldworks also concentrate on agriculture and herding systems which fed the early cities along with craft production and exchange.

9.1.3 'Bronze Age'

'Bronze age' as defined by Shereen Ratnagar (2011), "is a stage when several technologies depended on the use of copper or bronze tools, with metallurgy developed into a full-blown specialization".. It is however, important to understand the causal relationship between bronze metallurgy and the emergence of states and urban centres, if any. The use of copper metal began in the period termed as 'Chalcolithic'. Copper in its ore form was not strong or hard but when alloyed with tin or lead produced more durable and stronger articles. Though stone was more abundantly found and copper and bronze could be easily moulded into variety of shape by casting method. Bronze Age formed a period when this alloyed metal was used as primary material for making tools. Alloying

needed great specialisation as one needed to understand the nature and properties of different metals before mixing. Also, the artisan had to understand the proportion of metals to be mixed to get the best results, else could make the tool brittle. It is therefore, Gordon Childe considered this skill to be highly specialised which needed apprenticeship before mastering metallurgical techniques. He acknowledged metal workers or 'smiths' to be one of the earliest specialised artisans.

Copper was a rare metal while tin was rarer. Therefore, metal workers probably travelled to regions where these metals could be found easily, smelted the ore and brought the pure metal back to make tools. This led to the exchange of ideas, techniques and high valued materials among communities. This also gave rise to diverse professions such as merchants, traders, artisans, groups who managed and controlled these affairs and so on leading to emergence of complex societies. The uniformity, expansion, monumental structures, planned towns, writing, long-distance trade, etc suggest emergence of some kind of institution which managed all this. Another advantage of using copper and bronze was that it could be recycled and casted into new forms and shapes by melting. This also indicate towards importance of metals which were rare and needed to be stored and reused. Therefore, a connection can be established between bronze metallurgy, long-distance trade, urban centres, state institution and complex societies.

9.1.4 The 'Urban Revolution'

Gordon Childe (1936, 1952), an archaeologist and historian, formulated the term 'Urban Revolution' for the first time while finding the causes for the origins of civilization. He suggested that it followed the 'Neolithic Revolution' which saw the beginning of farming. 'Urban Revolution' on the other hand witnessed the development of metallurgy and emergence of a new social class involved in full-time craft and its specialisation. These communities lived in cities. The people in cities were fed on surplus production in the villages. But the articles produced by the artisans had to be distributed and raw material obtained, sometimes from far off region. Both these requirements reduced the self-sufficiency of the farming communities. Agricultural techniques advanced with time which led to higher yield per capita to support the increasing non-farming population. Centralisation of food supplies, production and distribution began as irrigation facility led to increase in productivity. Tribute and taxation caused wealth accumulation, finally giving rise to a new class-stratified society. This new society was based on economic classes and not on the traditional kin ties. Childe also focussed on writing system for keeping administrative records and for developing exact and predictive sciences. Monumental architecture, transportation by land and water were other requirements of the new society. Religion acted as a unifying force in the urban life as priest-kings and despots rose to power.

Key to 'Urban Revolution' was technology and the development of craft specialisation by the full-time artisans. Later archaeologists associated craft specialisation with cultural complexity finally leading to state formation. They also proposed that as craft specialisation increased so the cultural complexity. This proposal however has been criticised by some scholars on the pretext that many egalitarian societies too have craft specialisation. Many chiefdoms big or small patronised craft specialists, who produced luxury goods and articles. Patronising artists

was supposed to be a way of acquiring social position, rank and wealth in the society. Craft specialisation was important because it became the base of permanent investments which eventually formed the inheritable wealth, a prominent feature of civilization.

In the early stages the concept of 'Urban Revolution' gained widespread popularity. Gradually scholars realised the revolution hypothesis was problematic. Craft specialisation, for example, was more of a sign than a cause for state formation, as well as it is not even unique to civilizations. Moreover, surplus production as the premises of state and city formation does not explain the reason behind the need of surpluses at the first place.

In the 1960s, some new researches brought different views on 'Urban Revolution'. Robert Adams and other archaeologists on Mesopotamia, argued on overemphasis being given on the city neglecting social change, i.e. the development of social classes and political institutions. Adams (1966) indicated towards the course of development where the communal control of land by kin groups provided the base for the growth of private property in both the early Mesopotamian and early American civilizations. This eventually resulted in a stratified form of social organisation strictly divided on the class lines.

Many other hypotheses such as 'ecology and irrigation', 'technology and trade', 'warfare' 'cultural systems' and 'environmental change' have been proposed by various scholars but none of them explains the cause of origin in totality. Different regions is supposed to have different causes, though the civilizational characteristics seem to be more or less similar. Finally, even after much debate and criticism over Childe's proposal of the term 'Urban Revolution', scholars have yet not been able to completely replace it by any other argument. Many of his explanations still stand valid though not in totality.

9.2 BEGINNING OF CIVILIZATION

Old-World Bronze Age civilizations such as Mesopotamian/Sumerian, Egyptian, Harappan and Chinese, emerged on the banks of rivers. These are 'primary' Civilizations based on bronze metal but 'secondary' Civilizations such as Aztecs, Incas and Maya, are not based on metal and emerged in later Centuries CE. Rivers formed an important backbone to these civilizations since it provided fertile alluvial soil for high agricultural productivity. High production led to surplus which formed the basis for the emergence of Civilization and early State structure. However, these civilizations lacked sufficient metal, stone, timber etc which were traded from different regions. Another factor contributing to the beginning of civilization was the emergence of specialised artisans and professionals, who not only produced metal artifacts but also many other utility articles. Among all factors contributing to the growth in civilization, the geographical location and ecological settings became the key.

9.2.1 Geographical Settings and Environment

9.2.1.1 Egypt

In order to understand the development of Ancient Egypt, it is important to understand the geography of the Nile Valley. Since the beginning of farming, Egypt was divided into two broad regions. Lower Egypt covered the Nile Delta and the Mediterranean coast and the Nile River as far upstream to Cairo. Upper Egypt extended upstream

as far south as the First Cataract, around the modern town of Aswan. These two regions were unified under a single government during Dynastic Period. Herodotus famously quoted Egypt as the gift of the Nile, while Nile was the gift of rainstorms in the mountains of eastern and central Africa. 'White Nile' joined 'Blue Nile' at Khartoum, in Sudan. Earlier one flows out of the lakes and springs of central Africa and the later one is fed by summer monsoonal rains in the Ethiopian savannas and highlands. Heavy spring rainfall in east Africa transported silt-choked floods annually down the Nile valley. All along the way it deposited a rich layer of fertile silts and clays. Natural alluvial soil is produced along the river course, thus making it one of the world's richest agricultural zones, which produced food enough for about 450 people per square kilometer even with the simplest tools.

Before becoming farmers, ancient Egyptians fed on perch (type of freshwater fish) which could be easily harpooned. The cultivable strip run from Sudanese border to Cairo, mostly only few kilometers wide. The black, irrigated croplands is circumscribed by the rocky desert in most regions. The demarcation is so distinct that at a time one could place one foot on cropland and the other on the desert! The 'black land' was called *Kemet* and the desert as *Deshret* 'red land' by the ancient Egyptians. This geographic dichotomy of the Valley and Delta was well accepted by the Egyptians. For people of ancient Egypt their land was composed of two different geographical divisions-*ta-shem--a*, or the 'land of the *shema* reed', running between the Nubian border and the border of Delta; north of that, the Delta, was *ta-mehu*, the 'land of the papyrus plant'. It is this division that in modern times is referred to as 'Upper Egypt' in the south and 'Lower Egypt' in the north. The 'Upper' and 'Lower' terms are based on the gradient of the Nile.

The complex irrigation systems using dams and long feeder canals developed quite late in Egypt's history. For in the beginning people waited for the spring floods to recede, leaving back the rich alluvial soils. This was then utilised to spread seeds on the ground and then they used pigs and sheep to run over them to push the seeds in the ground. They weeded and hoed the crops as and when required and then waited for the bountiful harvest. To protect the harvest from birds and rodents they domesticated cats. The Egyptians divided a year into three periods of four months each and based their annual calendar on flood cycle. The period of flooding between July and October, was called *akhet*, probably meaning 'inundation'. Cropping was done between November and February, which was called *peret*, or 'time of emergence'. From March to June was the harvest season, called as *shemu*. With bountiful harvest and sensible storing of grains by the people, the Nile Valley emerged as rich enough to support high population densities. Nile also acted as an efficient transportation and communication channel which helped in the emergence of highly centralised empires.

9.2.1.2 Mesopotamia

Small area of southern Iran and Iraq encompassed the Fertile Crescent, and the surrounding lowlands, or the 'Greater Mesopotamia'. Two ecological elements need to be taken into account in the Southwest Asian cultural history: firstly, the alluvial soil producing great variety and reliability of agriculture in this region, and secondly, the great cultural diversity through regional and international cultural influences. The area extended from the uplands of Iran to the east to the Arabian and Syrian deserts in the west. The plains had long, intense hot and harsh summers, and cold winters. It would be all desert without Tigris and Euphrates which had large number of

tributaries. Rainfall was low and insufficient for growing crops but with irrigation, the alluvial soils of the lower plains could be farmed. Arnold Toynbee, a historian, argued for civilizations first evolving in challenging environments where people had to overcome severe problems of climate and resources. The southern part of Mesopotamia had no usable stone or metal, had few trees and a harsh climate.

The lower elevations of the Zagros and Taurus mountains of the Fertile Crescent were natural habitats of wild wheat, barley, sheep and goats. In ancient times this region was covered with vast grasslands, oak and pistachio forests. Since very beginning in the alluvial lowlands, people fought and traded for the gold, silver, copper, stone, wheat, sheep and goats of the mountains. In the foothills and plains of the piedmont of the great arc of mountains saw some of the earliest farming villages in the world. This region had sufficient rainfall almost everywhere to grow wheat and barley continuously. Northern Mesopotamian plains, downwards from the piedmont is dry. The Tigris and Euphrates have cut deep into the land and so irrigation here needed sophisticated dams and canals to utilize the river water. Irrigation, however made this region ‘breadbasket’ of some of the greatest empires of antiquity. The heartland for the very first cities was the lower alluvial plains of Mesopotamia. Farmers could get high crop yields from relatively small areas of land, sufficient enough to feed huge populations. The agricultural heartland is enclosed in large deserts, from Syria into the Arabian Peninsula. By 6000 BCE, or maybe earlier, farmers had begun diverting the waters of the rivers, manufacturing potteries decorated with incision and painting. Pottery was the most common artifact excavated by archaeologists, leading to establishing of chronology of the sites. Within 2000 years, the urban civilization of the Sumerians had emerged.

Check Your Progress (CYP)-I

A. On the basis of your understanding of the previous sections, answer the following questions in your own words:

Q 1. Explain the term ‘Civilization’ and ‘Culture’.

Q 2. Define ‘Urbanism’.

Q 3. Highlight the significance of the term 'Bronze Age'?

B. Fill in the blanks:

- a) The term 'civilization' originated from the Latin word
- b) 'White Nile' joined 'Blue Nile' at, in Sudan.
- c) The 'black land' was called and the desert asor 'red land' by the ancient Egyptians.
- d) Northern Mesopotamian plains isof some of the greatest empires of antiquity.
- e)was the most common artifact excavated by archaeologists, leading to establishing of chronology of the sites.

9.3 STATE STRUCTURE

9.3.1 State Formation in Egypt

The Pharaohs in Egyptian civilization held a divine position. They made their own laws and ruled on their own terms. Infact they were respected as a god whose divinity was personification of *Ma'at*, or 'rightness', even more than that as a 'right order', and stood for order and justice. *Ma'at* embodied the Egyptian state itself having the Pharaonic status. They controlled the Nile flood, rainfall and all the people including the foreigners. As Wilson suggest that the Old Kingdom had no words for 'government' or 'state' in the written language as it was conceived as part of the Pharaoh. The Egyptians believed their state and culture to be a living organism of which, from the Pharaoh to the lowliest of slaves were a part. The theory of 'divine kingship' was followed by the ancient Egyptians. The state was a combination of both human and divine elements. People interacted with god through the medium of Pharaoh. Some scholars have suggested the position of Pharaoh as divine and not the Pharaoh as an individual. The scholars refer to the statue of Khephren, in the pyramid at Giza, where the god Horus is shown protecting the king by spreading his wings. Also, many times the Pharaoh is shown confronting the gods, not as one of them. Thus, the duty of the Pharaoh was to 'contain disorder' and maintain domestic peace and prosperity. To achieve these jobs, he participated in many religious rituals.

Egyptologists have divided the ancient Egyptian civilization into four major periods: Archaic Egypt (2920-2575 BCE) or the Early Dynastic Period and the Old Kingdom (2700-2180 BCE), the Middle Kingdom (2133-1786 BCE), the New Kingdom (1567-1080 BCE) and the Late Period. Between first three were the First and Second Intermediate periods separating them due to political change and instability.

The *Archaic Period* (2920-2575 BCE) was a period of consolidating and subordinating powerful local chiefs into a unified Egypt. King Menes or Narmer and his successors successfully achieved this feat. Memphis (near modern Cairo) was established as the capital, diverting the stream of the Nile to develop a strategic location at the junction of Upper and Lower Egypt. Narmer controlled all the powers of village shamans (or curers), and had complete authority over the Nile. He probably, controlled 22 *nomes* (administrative units) of the Upper Egypt and 20 *nomes* of the Lower Egypt. Nekhen was perhaps the early capital. The Narmer Palette was in honour of King Narmer's (also known as Menes) victory over a northern ruler in about 3,000 BCE. He is crowned with both Upper and Lower Egypt, with a face of god Horus on one side. The Palette reflects emergence of Pharaonic Egypt. The Egyptian art represented the power of the king through depicting smiting nomads with a mace, frequently. The Pharaohs wore the insignia of royalty carrying crown, sceptre, and other ornaments. A centralised bureaucracy was developed to administer the labour and collect taxes. This was the time when Pharaonic tradition was 'invented' in Egypt where its ideology was translated into architectural and artistic styles. Most significant of these were the royal tombs which formed the symbol of kingship. The rare appearance of king in the public was occasion of spectacle, representing major ritual events and festivals. Such occasions were for the accommodation of regional diversity and projecting king as most powerful entity.

For a state in Egypt, the king was the most powerful person and the ruler of the entire territory. The territory constituted the Universe, triumphed by the great king or Pharaoh (*peraa*, in Egyptian meaning the Palace). This ideology of supreme power legitimized the rule of the pharaohs to rule over their subjects and survive the political upheavals. The terms *father*, *king* and *god* were interchangeable in Egypt indicating divine power to the ruler based on inequality. This was considered natural order very much established when gods were creating the Universe. Pharaoh was the uniting factor with unchallenged power and instilled confidence and stability in people.

Not only political but the pharaoh controlled agricultural surpluses and labour. His power got legitimization through these controls over resources and surpluses. Since agriculture was the most basic to Egyptian economy, authority over irrigation was an important way of asserting power. It was Pharaoh's responsibility to provide irrigation facilities to people for good harvest. This benefitted not only a small number of elite but also across the common people to some extent. The pharaoh enforced his power through an organised bureaucracy. Variety of symbols such as the falcon god, Horus spreading his wings on the royal vault signifying divinity of the Pharaoh, and a double crown (*pschent*) as establishing sovereignty of the Pharaoh over both Upper and Lower Egypt.

The Pharaonic state depended much on its vast and organised bureaucracy. The bureaucracy managed equitable and immediate distribution of foods among people which was more important than wages. The provincial governors (*nomes*) and other officials were delegated authority by the Pharaoh. The rulers depended on resource cycle such as taxation, which brought resources, which was redistributed among a large number of people working for the development of the state. The scribes kept these records. Scribes were part of high officials since writing was an accomplished art, above all crafts even the most skilled ones. Writing was equivalent to power to some extent which could control the labour of hundreds of people. Scribes supervised minutely every moment of the food cycle. Their work included measuring of grains at the threshing floor, monitoring of grains while transiting to check

robbing, and inventorying grains. They also collected taxes in kind and, in labour. Royal Counsellors such as *Vizier* held vast powers delegated by the king and looked after many aspects of governance such as tax collection and redistribution of surplus to both state and temples, census, and irrigation system. They could raise armies and build temples. Since irrigation was most important economic activity, special officials called *adj-mer* ('canal digger') were appointed to look after its functions. Another set of administrative officials called *per-mu* were appointed to record the level of water of the Nile. It was for the cooperation, conservatism and cohesion of the bureaucracy that the Egyptian civilization survived as a strong centralised economy.

The transition from Archaic Period to the *Old Kingdom* (2700-2180 BCE) was gradual. The Old Kingdom perceived four dynasties of Pharaohs with royal capital at Memphis. By This time development of the society depended on their ruler, who was supported by their labours. The economy had become quite complex, involving long distance trade to Syria and beyond. Large volume of local exchange of craft goods and foodstuffs began. However, most Egyptians continued to live in unwalled, self-sufficient villages. There were very few towns or cities even during Old Kingdom period which were incorporated politically into one country. Population growth was quite slow with little or no competition for farmland or water for irrigation. It was only towards the end of the period that population exerted some pressure on resources. Such a situation emerged when large animals for hunting almost disappeared from the Alluvium and people began to rely more on grain agriculture, shifting away from pastoralism.

The Old Kingdom period was a fascinating time when many greatest pyramids and palaces were built, an organised bureaucracy formed and arts and crafts was at its best. The king entirely controlled the economic exchange as no merchant class emerged until centuries after the end of Old Kingdom. Every class-craftsmen, peasants, scribes and others- rendered services to the king and were liable for military and civil conscription. Pharaohs such as Khufu and Khafre, built the pyramid-tombs of Giza, in which state's resources was exploited to the limit. Surprisingly, throughout most of the Old Kingdom there was no standing army, neither any significant presence of slavery for economic benefits. Though the administration was highly centralised, economy based itself on simple re-distribution, almost like the chiefdom, quite different from the early Mesopotamian states.

Djoser, founder of the third dynasty, and his successors (Khufu and Khafre) ruled over vast territory. After the death of Djoser in 2649 BCE, a new image of kingship originated. This was the mystic symbol of the sun. The cult of the Pharaoh was blended with the worship of sun by the powerful priests. The sun god was anointed as the heavenly ruler, while the Pharaoh was not a territorial ruler now but was deity's representative on earth. After death the ruler assumed the identity of Osiris, the Lord of the Dead. I. E. S. Edwards, an Egyptologist, opined that the growing influence of the cult of sun led to emergence of new conception of life after death where the dead ruler followed the rays of sun across the sky. By the Fifth Dynasty, Pharaoh was believed to be the 'perfect god' and was associated with the sun god 'Re' and was declared as the 'son of Re'. The pyramids acted as symbol in stone of the sun's rays piercing through the clouds, a permanent stone stairway with the ruler's mortuary temple on the east side, which was the side of the rising sun. (Fagan, 386).

Scholars are still trying to look at the functioning beyond the main centres of the Old Kingdom. Recent researches

and excavations however, point toward dense population. Interestingly many Delta settlements were part of 'pious donations', given tax exemptions to some communities. The exemptions were in response to their revenues being used for supporting tombs in the vicinity. The Old Kingdom had very flourishing trading and political relationship with the contemporary Mesopotamian civilization. The land and the sea routes to Southwest Asian region crossed through the Delta, thus establishing its importance. It was by about 2400 BCE that maximum population concentrated north of Saqqara, while the political seat remained at Memphis for long during ancient history. The fort city of Elephantine, near Aswan guarded the Kingdom from the south. The earlier towns of Hierakonpolis and others continued to hold its importance throughout the Old Kingdom period.

9.3.2 Mesopotamian Political Structure

The Early Dynastic Period (c. 3000-2350 BCE)

One of the most significant developments of the Early Dynastic period was the origin of a secular-based political authority. Palaces at Kish, Mari, Eridu along with royal cemeteries of Ur and Kish reveal much about the period. Each city-state was headed by a ruler who contested with the other for power and prestige. The Sumerians were in constant contact with other states and urban centres in northern Mesopotamia. Political authority was most effective in the city, with temple priests being the major controller of the trade, economic life and political affairs. Gradually with increasing social complexity the city rulers became more secular. In the meantime, the volume of long-distance trade increased so much that the Sumerian rulers had to make conscious effort to develop a formal maritime trade, through the Persian Gulf, to the eastern regions such as the Indus Valley Civilization.

Evolution of Political Structure

As population rose the concern for defending resources in the villages and settlements emerged. Sumerian tablets as well as archaeological records points toward warfare and constant fight between the neighbours. The city-states raised their separate army to defend their rights over water, trade routes, city walls and other natural resources. With the increasing wealth and power of the various city-states the internecine strife also increased. At different times city-states such as Erech, Lagash, Ur and Kish controlled their neighbours, but for short periods. The Sumerian cities was also threatened continuously by the surrounding nomadic groups, from the mountains and deserts, who constantly encroached on the settled areas. They disrupted the city life sometimes to the extent, making it completely impossible for the people to travel anywhere. In reality, the city states were place for socio-economic strife in early Mesopotamia.

The origin of kingship in the Early Dynastic period extremely diverse. The titles of the rulers originated from some mythical accounts. (Jacobsen, 1943). Some of the cities called their ruler as *lugal*, or king, suggesting the elevation of king from a warlord, elected by the general assembly. Some other cities had rulers known as *sangu*, or accountant. This was the term used in the texts for the chief administrator of a temple. The office of the ruler in that city-state perhaps originated as an extension of the powers of the chief administrator of the main temple. Another common title *ensi*, was linked to the temple elite. Though the meaning of the term *ensi* is unclear, it was probably related to the word, *en* previously used as the human spouse of the city goddess. Hence, the term *ensi*

originally was related to a member of the temple elite, may be the protagonist in festival rituals, who acquired broader authority gradually on the basis of religious powers. Later, another term, *ugula*, or foreman, is found from the trading centre of Assur in northern Mesopotamia. Since the city of Assur was centre for trading and manufacturing, persons from the industrial sector of the community must have been raised as the king. Thus, it can be established that rulers emerged in different cities under different circumstances and changes in the Early Dynastic rulers must have been due to changes in the power base. Religion was most of the time used to sanctify the king, the king being protagonist in the most important festivals.

Sumerian epic poem about Gilgamesh, give references of town assemblies and their appointed rulers. This text records about the intercity conflict and the importance of 'Council of Elders', and the 'General Assembly' as the prominent decision maker bodies. Everyday's public issues were dealt by the council of elders, while the crucial issues were decided by a general assembly of all adult male citizens. When an emergent situation occurred-times of threat of war-this assembly conferred supreme authority on one of its members, proclaiming him the king. This kingship was probably limited only to the period of emergency and the power was resumed by the assembly once crisis ended. N. Postgate (1994), argued for a form of simple democracy existing in the city-states during the Early Dynastic period.

The sequencing of early rulers of Mesopotamian city-states was done with the help of a 'king list', compiled in about 1800 BCE. (Gadd, 1994). Though scanty information is there yet it is uniform. Lists of rulers and their years of reign has been provided for almost all the major cities of early Mesopotamia. Even sometimes a short note was added regarding important incident or act of king for which he was celebrated. However, this type of notes was not frequent and so the chronological arrangement of the kings and their dynasties needs to be corroborated with other sources such as inscriptions, archaeological evidence and accounts from later period. Kish seems to be the earliest power centre, with the title 'King of Kish', probably conveying that ruler of Kish was overlord of entire land including other city-states. Later, Kish was defeated by the king of Warka, Gilgamesh. Nippur was the holy city where monuments and temples were constructed by the king who ruled Kish. With time the city of Ur gained supremacy and it was supposedly, during this First Dynasty of Ur that the Royal Cemetery was used. The names of the kings of Ur provided in the king list do not coincide with those mentioned in the tombs. This casts doubt on the accuracy of the king list. About 2500 BCE, Lagash emerged as one of the most powerful city-states. Eanatum, *ensi* of Lagash assumed the title of king of Kish. In records he is said to have fought Ur, Warka, Kish Mari and even with neighbouring Elam. The last king of Lagash was Urukagina, known more for his social and ethical deeds than his military exploits.

By c. 2350 BCE, crisis in the government bureaucracy was evident. The wealthy were cheating poor; taxation had to be revised and social customs had to be reviewed. Lugalzagesi, from the city of Umma was the last great ruler of the Early Dynastic period. Most of the time in 20 years of his rule, he spent in military campaigns. He defeated Urukagina, the ruler of Lagash and followed by Warka. He then assumed the titles King of Uruk (Warka) and King of the Land of Sumer. A prophetic description found at Lagash indicated sin committed by Lugalzagesi by destroying it. This sin was committed against the patron god, Ningirsu, of Lagash. The prayer was

soon answered when a new military king from the north, Sargon of Agade, subdued Lugalzagesi and brought him before the temple of Enlil in Nippur. With the defeat of Lugalzagesi, Mesopotamian history took a major turn. Sargon of Agade and his successors converted city-states into a national state and established the supremacy of the Semites over the Sumerians.

Check Your Progress (CYP)-II

True or False:

- a) Pharaohs in the Egyptian civilization were respected as a god whose divinity was personification of *Ma'at*, or 'rightness'.
- b) The theory of 'divine kingship' was followed by the ancient Egyptians.
- c) The terms *father*, *king* and *god* were interchangeable in Mesopotamia indicating divine power to the ruler based on inequality.
- d) The sequencing of early rulers of Mesopotamian city-states was done with the help of a 'king list', compiled in about 1800 BCE.
- e) Ur was the holy city where monuments and temples were constructed by the king who ruled Kish.

9.4 ECONOMY

9.4.1 Rise of Urban Centres in Egypt

The Egyptian civilization emerged in the south, in Upper Egypt. Sir Flinders Petrie, in 1894 found around 2,000 graves at *Naqada* and suggested it to be Predynastic cultural sequence. Slate palettes, stylised flint tools, pottery of different styles, jewellery made of bone and other materials, figurines, beads and other objects was discovered from the graves. These grave goods and other materials found from various Predynastic sites indicate towards rapidly changing society. The society became class-stratified and religiously unified.

The *Heirakonpolis* (in Greek), the 'City of the Hawk' or *Nekhen* was the largest and most complex Predynastic settlements in Upper Egypt. Michael Hoffman (1982), excavated the site and suggested that people lived in rectangular, semi-subterranean house of mudbrick and plaster and thatch houses. The wealthier craftsmen and traders had larger houses with separate compounds. Social differentiation could be distinctly seen. Along with farming communities also involved in hunting, herding and fishing to supplement food. The population consisted of around 2000 and the settlements including the two large *Naqada* settlements with population about 800-900 inhabitants, were called 'towns'. *Nekhen*, between 3800 to 3000 BCE was still a small village with a few hundred people, increasing within three centuries to about more than 10,000. People worshipped in small, wooden shrines, they produced and distributed several varieties of pottery, some of them beautifully designed.

The Abu Suffian cemetery near *Nekhen* reveals graves of prominent members, probably rich traders, whose profit came from the fine-quality Plum Red pottery used to adorn the tombs made of rocks and mudbrick, up and

downstream. The tombs reflect social power and prestige of the individual. A 'royal' tomb adorned with wall paintings depicting a ruler smiting his enemies and sitting under a shade has been discovered. The motifs have survived into pharaonic times too. The famous Narmer Palette, which is famed as commemorating the unification of the Nile Valley and Delta into a national state, has been found at *Heirakonpolis*.

Abydos or *Abdju*, developed into town in about 3150 BCE. The cemetery of early Dynastic kings has been discovered in mud brick chambers built in large pits. These had developed from the earlier graves and the freestanding columns had the king's name carved on it. Near to cemetery was a funerary palace and a freestanding building inside. The entire structure indicates towards the receipt of tribute when the king appeared in public. The construction of pyramids generations later followed from the royal tombs made during Predynastic period and had become a significant symbol of kingship. *Abydos* remained an important sacred town throughout ancient Egypt. Kings associated themselves to it for their temples or ancestors being buried there. Most significant temple was of Osiris to which ancient Egyptians were attached and thus wanted to get buried close to it.

A few other important towns developed during the Predynastic period were *Coptos* or *Qift*, situated on the eastern bank of the Nile, near the modern town of Luxor. It was significant as the origin point for trading through Red Sea. *Coptos* developed as the key administrative and commercial town. In the later Predynastic period, it developed into the administrative centres of the *nomes*, or local bureaucratic chiefs. *Nome* capitals were also centre of political and religious power along with being economic centres for craft production and distribution. Fekri Hassan, suggest these *nomes* to be major links for integrating Egypt.

Hassan opined that the development of complex society in Predynastic period was a long, involving process with climatic changes, warfare, evolving farming technology, emergence of political and religious institutions, all being interconnected.

Predynastic period was a phase for the establishment of 'Great Culture' of Egypt, with complex societies, trade patterns, craft specialisation, large-scale public works, organised patronage of arts and crafts and settlement patterns. These features formed part of the tools of authority, a systematized religion, a distinctive ideology and other cultural expressions. As these expanded to larger towns and cities, the 'little culture' of provinces and villages shrank. The Archaic and Old Kingdom periods formed the base for the Egyptian civilization, with political unification of Upper and Lower Egypt for the first time. There was emergence of Egyptian forms of writing, architecture, administration and ideology.

9.4.2 Trade and Economy in Mesopotamia

The Sumerian lowland environment was treeless, lacked metal and timber, and had no semi-precious stones. The only resource available was its fertile soil. Hence, most of these commodities was obtained by trading with regions rich in such items. Initially this trade was on village-to-village basis, later in a much more organised form. Most of this trade was controlled by the temple organisations as these formed the centralised storehouses. Trade was basic to Sumerian economy and a large number of people were involved in different trading activities. Food and other basic commodities were redistributed for specific purposes by various institutions. Temples distributed

food rations to the people who laboured for them. The palace assumed a share of this responsibility in the Early Dynastic period. Minor officials were given land in lieu of their services. Iranian Plateau and the highlands were major regions from which raw materials were obtained for the manufacturing of weapons, ornaments and prestigious objects or the items of luxury.

The intercity and interregional trade was managed by a class of merchant agents, called *dam-gar*. These merchant agents acted on behalf of the king. Consumer goods such as barley, garments, cloth, oil, and flour were taken from the royal storehouse and exchanged them for foreign goods. The *dam-gars* formed a part of administrative hierarchy but acted with the help of private enterprises. This indicated toward private enterprises being involved in governmental functions, establishing private capital as power base, competing with the temple organisation and newly merged kingship. Importers and exporters along with transporters of goods led to the rise of specialised traders' community. Further, by Early Dynastic period, a phenomenon, 'port of trade' developed. Ports of trade provided a neutral place for meeting of traders from hostile states, as well fixed and regulated prices for conduct of trade. They were mostly located on the coast or near the boundary between two important empires. Tepe Yahya in southcentral Iran and the Persian Gulf Island of Bahrein probably acted as ports of trade for the traders from Mesopotamia and Indus Valley. Another phenomenon, an alternative to ports of trade was the setting up of foreign colonies of traders in the areas rich in raw materials. Anatolia and Tell Brak regions provide evidence of such colonies in the 2nd millennium BCE. Evidences from Early Dynastic period suggest conduction of trade by officials of the major urban institutions who travelled to nearby regions for raw materials and dealt through intermediaries for supplies from far off areas.

With increasing interregional exchange, metal tools became much more common including domestic tools and weapons. Through trading routes technological innovation spread such as copper metallurgy which developed by alloying copper with tin to make bronze. Another innovation was metal and wood tipped plow which helped in digging the land deeper. By using this plow Sumerians increased their agricultural yields which they shipped to the regions in exchange of required commodities. Sumerians also had flourishing industry in textiles and other luxuries. Apart from waterways, caravans also carried metals, skins, ivory, timber and precious stones to Sumer through rugged terrain. Even caravan of pack animals was exchanged connecting Anatolia, Mesopotamia, Mediterranean coastal region and to other isolated towns of the Iranian Plateau. Economic elements such as wholesaling, contracting, floating loans were prevalent and market was driven by individual profit motive. Mesopotamians traded extensively with towns and cities in the Iranian Plateau. Susa was a significant city where the trade routes between Mesopotamia and east converged. Along with acting as port of trade, Tepe Yehya, produced bowls which was traded as luxury item to Mesopotamia and was a highly prized possession afforded only by the rich. An extensive trading in turquoise and lapis lazuli flourished after 2800 BCE between Shari-i-Shokhta in east Iran and Mesopotamia. Volume of trade increased with time and every city-state and perhaps entire civilization depended on what scholars call it a nascent world system for survival and not only for political stability.

Apart from trade Sumerian economy depended on farming and herding, crafts production and

manufacturing. Farmers in Sumer cultivated wheat, barley, vegetables, and dates. People raised cattle for draft power, hides, milk and meat and ate fish as staple. Pork was very much part of the food system for their fat and grease and pigs were a common sight on Sumerian farms, however later it became a taboo food in the Middle Eastern regions. Sumerian economic system was well organised where farmers cultivated surplus to support full-time craftsmen and long-distance trade. Crafts and manufacturing industry grew in scale. Pottery continued to be mass produced for household storage purposes. Textiles were weaved out of wool and flax by the slaves- documented for first time- during the Early Dynastic period. Weaving was an extremely flourishing industry in Sumerian economy. Another specialised industry established was of metallurgical production. Implements, containers, and artwork were produced out of copper and bronze metals. Also, the new process of lost-wax casting was documented in several texts of the Early Dynastic period. This process brought variation in shapes in the artworks and implements.

Money was not used for economic exchange in Mesopotamia and it was only in kind. Administration of people and goods was facilitated by using pieces of inscribed stone to impress clay with signs of authorization. The stones were in the form of stamps or cylinders rolled across clay to make an impression. These stamps and cylinders varied in size and in the complexity of the symbols incised on them. The impressed clay was divided into two classes- *commodity sealings* and *message sealings*. Contents of the container such as a basket, vessel, bale, or storeroom were certified by the *commodity sealings*. By placing clay lump over a knot, the items were sealed in sack or container to protect it from unauthorised access. The *message sealings* conveyed or stored facts about goods or people. These were of different shapes and sizes- either like numerical unit, bullae or small spheroidal, still others flat, rectangular tablets stamped with numerical symbols. Generally, clay tokens have also been found in about ten geometric shapes at many early Sumerian sites.

Check Your Progress(CYP)-III

Multiple Choice Questions:

1. Around 2,000 graves were found at *Naqada*, in 1894 by
 - a) Sir Flinders Petrie
 - b) Michael Hoffman
 - c) Fekri Hassan
 - d) V. Gordon Childe
2. Which Predynastic settlement in Upper Egypt was known as 'City of the Hawk' or *Nekhen*
 - a) Abydos
 - b) Coptos
 - c) Hierakonpolis
 - d) Abu Suffiyan

3. A 'royal' tomb adorned with wall paintings depicting a ruler smiting his enemies has been discovered from
- a) Qift
 - b) Abu Suffiyan
 - c) Abdju
 - d) Nekhen
4. *Dam-gars* were
- a) Merchant class
 - b) Priests
 - c) Farmers
 - d) Artisans
5. An extensive trading flourished after 2800 BCE between Shari-i-Shokhta in east Iran and Mesopotamia in
- a) Wheat and Barley
 - b) Pottery and Bowls
 - c) Hides and Meat
 - d) Turquoise and Lapis lazuli

9.5 LET US SUM UP

The emergence of Civilization signifies revolutionary changes that were brought about in the human evolution. Metallurgy was one of the most important factors which led to the rise of not only specialised class of craftsmen but also new socio-politico-economic, cultural and religious structures. With the growth of urban centres new professions and professionals emerged bringing more social complexities. Bronze became one of the major raw materials for making tools and utility as well as ornamental objects. Two of the most ancient civilizations-Egyptian and Mesopotamian or Sumerian emerged on the banks of rivers Nile and Tigris and Euphratus respectively. Both the civilizations were highly evolved politically and economically involving state structures and long-distance trade. They invented script for recording state affairs and provide as source material for understanding both the civilizations.

9.6 GLOSSARY

Preindustrial: The period before industrialisation.

Chalcolithic Period: The phase when copper metal and stone, both were used as raw materials.

Metallurgy: The scientific process of extracting metals from its ores and using it to produce tools and objects.

Piedmont: These are an area at the foothills of a mountain or mountain range. It generally connects the base of foothills to a flat land.

Archaic Period: Very old or ancient period.

9.7 EXAMINATION ORIENTED QUESTIONS

Short Questions:

- Q1. Discuss the common characteristics of preindustrial civilizations.
- Q2. Examine the debate around 'Urban Revolution'.
- Q3. Trace the causal relationship between bronze metallurgy and rise of urbanisation.
- Q4. Explain the importance of Nile river in Egyptian civilization.
- Q5. Which region emerged as 'breadbasket' and why?

Long Questions:

- Q1. Discuss the significance of the term 'Bronze Age'. Explain the features of state in any **one** of the following Bronze Age Civilizations: Mesopotamia/ Egypt.
- Q2. Account for the emergence of Bronze Age civilization in any **one** of the following: Mesopotamia / Egypt.
- Q3. What do you understand by the term 'Urban Revolution'? Discuss the nature of state and economy, with reference to any one of the following: Mesopotamia / Egypt.
- Q4. Discuss the role of environment in the rise and growth of First Civilization in Egypt /Mesopotamia.
- Q5. Discuss the relationship between economy and state structure, with reference to any **one** of the following: Mesopotamia / Egypt.

9.8 LESSON END EXERCISES

- Q1. Discuss the agricultural production of Egyptian Civilization.
- Q2. Explain the irrigation system in Sumerian Civilization.
- Q3. Define the term 'civilization' in the context of ancient societies. How is Mesopotamian/ Egyptian civilization appropriate to this definition?
- Q4. Account for the emergence of, and discuss the salient features of, the Bronze Age Civilizations, with reference to any **one** of the following: Mesopotamia / Egypt.
- Q5. Trace the similarities and differences between civilization and culture.

9.9 ANSWER KEY

CYP-I

Q1. See sub-section 9.1.1

Q2. See sub-section 9.1.2

Q3. See sub-section 9.1.3

A. Fill in the blanks:

- a) *civilis* (civil)
- b) Khartoum
- c) *Kemet* and *Deshret*
- d) 'breadbasket'
- e) Pottery

CYP-II

True or False:

- a) True
- b) True
- c) False
- d) True
- e) False

CYP-III

Multiple Choice Questions:

1. a); 2. c); 3. b); 4. a); 5. d).

9.10 SUGGESTED READINGS

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STAGE OF FOOD PRODUCTION

SEMESTER-I

UNIT : II

COURSE NO. : HIST104

LESSON : 10

ADVENT OF IRON:DEBATE ON THE ADVENT OF IRON

STRUCTURE

10.0 Learning Objectives and Outcomes

10.1 Introduction

10.2 Core Issues in the Iron Age Debate

10.3 Theories on the Advent of Iron

10.3.1 Hittite Iron Technology Development Theory

10.3.2 Accidental Discovery Theory

10.3.3 Diffusion Theory

10.3.4 Theory of Independent Invention

10.3.5 Multilinear Development Theory (Modern Perspective)

10.4 Let us sum up

10.5 Glossary

10.6 Examination Oriented Questions

10.7 Lesson End Exercises

10.8 Answer Key

10.9 Suggested Readings

10.0 LEARNING OBJECTIVES AND OUTCOMES

Learning Objectives

The objective of this lesson is to enable you to:

- explain the core issues related to Iron Age debate.

- evaluate the different theories on the advent of Iron Age.
- examine the modern perspective on the advent of Iron Age.
- identify the core ideas behind the different theories related to advent of Iron Age.

Learning Outcomes

After going through the lesson, you will have a clear understanding about:

- the Iron age debate.
- the different theories related to the advent of Iron Age.
- the modern theory on the Iron Age.
- the basis of different development of different theories on advent of the Iron Age.

10.1 INTRODUCTION

Dear learners, the emergence of iron signifies a crucial shift in human history, fundamentally altering technology, economy, warfare, and social structures. The shift from the Bronze Age to the Iron Age, usually placed between the second and first millennia BCE in various regions globally, has historically been a topic of vigorous academic discussion. Historians and archaeologists persist in investigating the origins, locations, and methods of iron technology's development and dissemination, along with the socio-economic impacts following its implementation.

A significant aspect of the discussion relates to the timeline and geographic roots of iron metallurgy. Previous research credited the Hittites of Anatolia with the discovery of iron smelting around 1500–1200 BCE, proposing a diffusionist model in which iron technology dispersed following the downfall of the Hittite Empire. Nonetheless, newer archaeological findings contest this theory, indicating various independent iron production centers throughout Anatolia, the Levant, Sub-Saharan Africa, South Asia, and China. Radiocarbon dating and metallurgical investigations have added complexity to the story, suggesting that iron experimentation might have started sooner than once thought.

Another critical point in the discussion is whether the advent of iron signified a technological revolution or a slow evolution. Although iron tools were initially less effective than bronze because of challenges in smelting and forging, advancements in carburization and smithing techniques eventually enhanced iron's durability and availability. In contrast to bronze that necessitated rare tin and copper, iron ore was more plentiful, possibly making metal tools and weapons more widely accessible. This transition is frequently associated with agricultural development, deforestation, population increase, and the rise of new political structures.

In the context of India, the discussion holds particular importance. Researchers disagree on whether iron technology emerged through outside influence from West Asia or originated locally within the subcontinent. Discoveries from archaeological sites like Atranjikhhera, Painted Grey Ware (PGW) locations, and the megalithic cultures of South India indicate an early and varied regional utilization of iron, potentially dating back to the second millennium

BCE. This affects the comprehension of the later Vedic era, the emergence of mahajanapadas, and the processes of forming states.

Consequently, the discussion regarding the emergence of iron extends beyond metallurgy; it engages with wider issues of technological advancement, cultural exchange, economic evolution, and historical development. Current research is progressively enhancing our comprehension, rendering the topic a fluid and developing area of investigation in ancient and early historic studies

10.2 CORE ISSUES IN THE IRON AGE DEBATE

The Iron Age was a major turning point in world history with regards to technological development and societal progress via the shift from bronze to iron as the primary material used for tools and armaments (weapons). Historians and archaeologists disagree on how and when this changeover occurred, resulting in four primary issues being at the heart of the debate regarding the Iron Age: origin, process of discovery, mode of dispersal, and historical significance.

The first of these important issues is regarding the knowledge base that allowed for the development of iron working. Early historian hypotheses about iron's origin claimed that iron technology began as a result of the Hittites' use of iron in both manufacturing and warfare in Anatolia in approximately 1500 BCE, which subsequently radiated outward from there into what would ultimately become known as the iron working region encompassing most of the modern-day Middle East to the Harappan civilization in what is today northwest India. This idea is referred to as the "Hittite monopoly theory." However, modern archaeological findings have revealed that iron production may have occurred independently in India, China, and sub-Saharan Africa, creating doubt amongst historians if the Hittites were the only creators or founder of iron production and creates the possibility that iron technology may have developed at multiple locations.

The second issue deals with how iron was first discovered. The accidental discovery theory states that iron was discovered accidentally through smelting of copper or bronze ores that had a contamination of iron oxide in them, producing an iron product whilst unintentionally heating ores rich in iron (ore contains a mixture of various chemical compounds, including iron oxides, clay, and silica), and coming to realize the strength of iron and continuing to smelt it on purpose over time.

The third issue centers on how iron technology spread. Historians disagree about where and how iron was 'adopted' after it was discovered, as there is no clear evidence for its spreading across nations. Historians also want to know what kind of impact iron had on the world historically. While most agree that it was significant, some believe that it led to great technological advancement, while others argue that it had more social implications than technological ones. In any case, this transition from bronze to iron involved not only different materials but also significant changes in social organizations, trade patterns, and economic practices across the globe, many of which continue today.

The fourth issue pertains to the historical influence that iron has had upon civilizations. Some historians claim that

the presence of and increased reliance on iron was the most important catalyst for agricultural expansion on a larger scaled than ever before, military strength and dominance through superior weapons causing the eventual urbanisation of many settlements throughout history and ultimately resulted in the formation of large political states. This is referred to as technological determinism; however other historians argue that iron in itself did not result in these large changes and were instead the result of a variety of other social, economic, and environmental factors that were responsible for the way iron became utilised within society. Therefore, iron is now viewed more appropriately as a facilitator of civilisations to transform rather than as the primary cause.

The fifth issue is a lack of a consensus regarding the time at which iron became commonly used around the world. Different regions transitioned into the Iron Age at different points in time which makes it very difficult to define an overall chronological time period for the Iron Age. For instance, iron was being produced and used before the onset of the Iron Age in parts of Western Asia and the Indian subcontinent while Europe and China did not start utilising iron on a widespread basis until many centuries later.

In conclusion, the ongoing debate associated with the Iron Age is not due to one question, but rather many interconnected questions that need to be answered. Historians of today accept a multilineal and region specific understanding of iron technology and understand that it came into existence by a combination of innovative ideas from humanity combined with the need for social stability and interactions between various elements of the human environment and the development of technology rather than just a linearly produced version through one historical event.

CYP-I

Based on the understanding of the previous section, answer these questions in your own words:

Q1. Discuss the time related issue about the use of Iron.

Q2. Write a short note on where and how the use of iron was adapted.

Q3. Fill in the blanks.

- (i) The theory that iron technology originated with the Hittites in Anatolia around 1500 BCE is known as the _____ theory.
- (ii) According to the _____ discovery theory, iron was first produced unintentionally while smelting copper or bronze ores.
- (iii) The view that iron was the main driving force behind agricultural expansion and state formation is called _____ determinism.
- (iv) Modern historians often support a _____ understanding of iron technology, recognizing that it developed in multiple regions independently.
- (v) The region of _____ Asia began producing and using iron before many parts of Europe and China.

10.3 THEORIES ON THE ADVENT OF IRON

Followings are the important theories propounded by the scholars:-

Hittite Iron Technology Development Theory

Accidental Discovery Theory

Diffusion Theory

Theory of Independent Invention

Multilinear Development Theory (Modern Perspective)

10.3.1 Hittite Iron Technology Development Theory

According to this theory development of iron technology began circa 1500 BCE in Hittite regions within the country of Anatolia (modern-day Turkey). Iron was viewed by both the Hittite kings and their people as being a royal, or secret, metal. After the collapse of the Hittite Empire circa 1200 BCE, iron technology subsequently spread beyond Hittite territories to the surrounding areas and eventually throughout the rest of the ancient Near East and beyond. Evidence for the use of finished metal artifacts made from iron appears to have been produced prior to circa 1500 BCE in regions geographically outside of Hittite territories.

The views of V. Gordon Childe, Leonard Woolley, J.D. Muhly, R.J. Forbes, and Robert Drews indicate that they supported the view that the Hittites were a regional leader in the production and use of iron technology and that the decline of the Hittite Empire led to the spread of iron around the world. The Hittites had established a powerful empire in Anatolia between circa 1600 and 1200 BCE, and developed a strong military, legal, and vehicle system (such as chariots). According to the Hittite Iron Technology Development Theory, the Hittites began producing iron objects circa 1500 BCE, earlier than those of any of their contemporaries.

Most of the early iron artifacts produced by the Hittites in Anatolia were ceremonial or royal objects created for use in royal ceremonies and celebrations suggesting that iron initially would be viewed as a valuable and/or prestigious material as opposed to a practical tool for everyday use.

Defense of the Theory

The evidence of some of the earliest iron artifacts has been found in the archaeological excavations in Anatolia, which date back to the middle of the second millennium B.C.E. This evidence has led scholars to conclude that the birthplace of iron technology was in the Hittite Area. Hittite writings and records show that iron was a valuable and scarce commodity, used primarily as royal gifts, for treaties, or in a religious context. This leads researchers to conclude that at the time, iron production was likely not yet mass-produced but rather controlled. The Hittites are believed to have kept their iron smelting technology secret, which allowed them to maintain their military and political supremacy by controlling the knowledge of iron production. In the Collapse of the Hittite Empire around 1200 B.C.E. during the collapse of the Bronze Age, it appears that iron artifacts began to be found almost everywhere in West Asia, the Mediterranean, and Europe. Adherents of this viewpoint believe that iron technology did not begin to spread until after the Hittite monopoly over its production ended. In comparison to bronze weapons, iron weapons were stronger, and more durable. The success of the Hittites in battle is attributed to their early access to iron technology.

Although this theory was prevalent among early scholars, it has a number of critical limitations. There are examples of iron tools/objects found in areas such as Egypt, Mesopotamia, India and Africa which do not demonstrate Hittite influence. There is evidence demonstrating smelting processes that are regionally distinct, suggesting independent regional developments. Early iron tools and other objects were primarily constructed from meteoric iron (often a mix of iron with nickel), rather than smelting processes used to create iron from ores. Hittite collapse did not immediately result in substitution of bronze with other materials (such as iron) indicating a slow transition period of time.

10.3.2 Accidental Discovery Theory

The Accidental Discovery Theory details iron's initial introduction into the world as a byproduct of prior activity in metalworking (particularly with copper and brass). Iron was not found as its own metal; rather, it originated from smelted minerals containing some form of iron while performing metallurgical work. A reason for the coincidence of finding metallic iron in the early stages of its discovery is because individuals were already in possession of furnace technology that generated extreme temperatures through other smelting procedures (i.e., burning copper-ore type material). It was a natural consequence to find metallic iron since many naturally occurring copper ores contained varying degrees of iron in the form of iron-bearing minerals. As early metalworking systems began creating metallic masses, 'blooms' formed that contained some of this smelted iron residue. At first, these 'blooms' were treated as impurities or used for decorations, or religious/magic purposes, until it was eventually discovered that iron was stronger and more durable than both, copper or brass. As individuals continued to experiment with these iridescent ores, smelters began to learn how to regulate furnace temperatures and the amount of oxygen they were introducing into their furnaces, thus enabling them to produce a more consistent

quantity of metallic iron than they had previously been experiencing. Finally, iron metallurgy developed out of prior established metalworking techniques rather than it being an accidental discovery.

Proponents of the Accidental Discovery Theory contend that the first iron artifacts uncovered through archaeology are both rare and poorly made; thus, they must have been made by accident or experimentation.

In addition, they point out that most of the earliest iron artifacts in both Western Asia and Egypt have been found in either a ceremonial or an aristocratic environment; for example, Tutankhamun was buried with a well-preserved iron dagger. This indicates that, at that point in time, the only purpose for using iron was as a status symbol — as opposed to the practical use of iron for making tools or weapons.

The Accidental Discovery Theory also addresses why bronze was not displaced by iron as soon as iron was available. At the time, bronze was already a well-established technology that posed no risks to those who used it. In contrast, early iron production was very problematic and subject to many external variables. Over time, due to improvements in the smelting process, iron became more reliable and functional for mass production and day-to-day utilization. Thus, the theory allows for the possibility that iron was discovered by chance through experimentation and subsequently developed through innovation.

Nevertheless, the Accidental Discovery Theory has several weaknesses. For instance, the theory does not adequately explain the organized iron production that was clearly present in later periods; nor does the theory take into account the existence of independent iron production traditions in sub-Saharan Africa, China and India, where the evidence clearly indicates that the people in those regions had engaged in intentional iron smelting. In addition, some archaeological sites indicate that iron was produced through systematic processes from the beginning, with results that do not support the assertion that iron was produced accidentally.

The Image of the Accidental Discovery Theory conveys the connection between technologies during the Bronze Age and those during the Iron Age. It also illustrates that iron was only used at first because it was a novelty and had a great deal of social significance as something rare and coveted by people who were able to produce it. Even though the Accidental Discovery Theory does not explain every regional variation of iron production, its continued use by historians helps them better understand how people came into contact with iron for the first time, and ultimately, became proficient at working with iron as a metal.

10.3.3 Diffusion Theory

In this explanation, iron technology is thought to have started in Western Asia and spread to Europe, India, and Africa through trade routes, wars, and migration; however, the diffusional models do not account for independent innovations being created independently. Scholars including V. Gordon Childe, Leonard Woolley, Robert Braidwood, and Henri Frankfort researched support for the diffusion theory, in that they believe the first iron technology was produced by the Hittites in Western Asia. They claim that as a result of intercultural contacts between societies iron technology spread from one core or origin area outwards into surrounding areas and around the world. The proponents of diffusion theory argue that Iron metallurgy did not develop multiple times as separate entities but diffused out of the West Asian region, specifically out of Anatolia & Mesopotamia, to other

parts of the world including Europe, Egypt, India, and so forth. The proponents of diffusion theory believe that the earliest systematic knowledge developed about how to process iron was generated by the Hittite civilization from Anatolia circa 1500 BC; they believe that initially, iron was rare among them and a metal of distinction, only used for ritual and/or royal purposes, whereby they held onto the secrets of how to create iron and concealed them from other civilizations. Following the fall of the Hittite Empire in circa 1200 BC, the knowledge of how to process iron diffused quickly throughout the entire West Asia region and beyond.

Numerous pathways have been used to transmit iron technology. One of the most important channels for disseminating iron technologies has been transnational trade networks from which merchants have: (i) transported iron implements and goods; and (ii) transferred technical knowledge (used to make and process iron) from place to place. Armies and migrations also helped transmit iron technologies, as iron craftsmen were captured or displaced. Diplomatic exchanges between countries provided additional opportunities to procure or develop iron-making technologies. In summary, iron metallurgy spread from the Near East, to the Mediterranean regions, Europe and Egypt, and on to the Subcontinent of South Asia.

Archaeological data indicate a general pattern of gradual dispersal of iron objects. The earliest examples of iron artifacts were manufactured in Anatolia and Mesopotamia, which were followed by Egyptians, Greeks, and finally, Europeans and Indians. The parallel design of early furnaces and smelting techniques across these areas has been viewed as evidence for the transmission of a common technology through trade rather than as independently developing societies. In addition, the evidence supporting the diffusionist hypothesis is sustained by the sudden appearance of an abundance of iron-based artifacts in a number of geographical areas after 1200 B.C. (see Fagan 1995).

The Diffusionist Theory of Iron-melting also suggests that the early societies were technologically and socially highly integrated. Ancient civilizations were not isolated entities but rather were integrated into a broad system of inter-regional trade involving (1) metals, (2) luxury items, and (3) knowledge of technology. Thus, the diffusion of iron technologies fits neatly into the more general framework of the diffusion of all aspects of culture.

The Diffusion Theory has come under considerable criticism from historians of the contemporary period. Evidence from archaeological excavations in India, China and Sub-Saharan Africa has produced artefacts from as early as 1000 BC, supporting the development of iron-working in local contexts, and not always in conjunction with the typology established by the chronology of West Asian archaeology. The large variation seen with respect to technology and technique in iron smelting indicates that local experimentation was part of each region's independent development of iron. Many historians insist that diffusion alone cannot adequately explain the global spread of iron technology.

The Diffusion Theory remains an important concept for historians as it illustrates the impact of contact between regions on technological innovations. Additionally, diffusion theory is an important tool in demonstrating how quickly technological information can be transmitted once the technology was established. The majority of historians now accept that diffusion was an important factor, but it must be generally reported to have occurred in combination with independent discoveries.

As such, Diffusion Theory, with respect to iron technology, posits that iron technology was developed through the sharing of ideas and cultural practices through West Asia to the rest of the world. While Diffusion Theory cannot be used as a single explanation for the individual developments of iron in different regions, it serves as a useful tool in developing an understanding of the interconnectedness of technological development in the ancient world.

10.3.4 Theory of Independent Invention

According to Iron metallurgy has been developed independently by the people in India, China and Sub-Saharan Africa At different locations with their own unique methods and techniques for processing iron are evidence of this development occurring independently but still having similar times for when they were each developed.

The Independent Invention Theory explains that iron derivative technologies do not have a single geographic origin from which they then spread around the globe but instead evolved separately throughout the world due to factors such as climate, availability of resources, and society's opportunity to experiment. Additionally, this contradicts the previous position of iron metallurgy being developed entirely by West Asian societies such as the Hittites.

According to this theory, societies with sufficient amounts of iron ore, who previously had experience working with other/metallurgical materials (copper/bronze), were able to develop their own means for smelting iron without the influence of other cultures. The techniques and skills required such that sufficient amounts of heat could be produced, the construction of a furnace, and the use of ores to smelt and shape iron.

Many places have provided extremely strong archaeological evidence for the existence of iron-working technologies, including:

India: There are several early iron sites such as Malhar, Raja Nala Ka Tila, and Atranjikhhera that have iron artifacts dated between 1800 BCE and 1500 BCE. The fact that there is evidence of continuous use of metal found from before this period through these early iron artifacts supports local iron-research development as opposed to an introduction from outside of the region.

China: By 5th century bce, China had developed very sophisticated cast iron technology using blast furnaces, which were different than the use of bloomery techniques utilized in western Asia. The differences in technology provide evidence that these two areas developed their own technologies independently.

Africa: In Nigeria, specifically among the Nok culture, evidence suggests iron smelting began around 1000 BCE and did not exist before that time, so the Nok likely represent one of the earliest traditions of producing iron as far as we know.

Europe: While there are examples in Europe that have been influenced through the introduction of iron working from western Asia, many areas in Europe have demonstrated their own experimentation or adaptations within the process of producing iron.

There are a number of logical reasons supporting the theory of independent invention of iron production, including:

- (i) **Availability of Raw Resources:** Iron ore is present in many parts of the world, thereby allowing for independent discovery of iron.
- (ii) **Continuity of Technology:** Existing traditions of furnace technology and the craft of working with metals exist in many geographic regions.
- (iii) **Cultural Variation:** The unique designs of furnaces and differences in smelting and processing iron varies by region suggesting distinctiveness in their processes.
- (iv) **Concurrent Use Throughout Chronology:** Many areas show the use of iron within close time frames to the occurrence of iron working in western Asia. The theory addressed here puts creativity at the centre of human development. Furthermore, it also rejects Eurocentrism and West Asian centric views of the history of technology and gives equal credit to all ancient civilisations that engaged in scientific experimentation and innovation. Thus, the global achievement of iron technology should not be viewed as the result of any one unique culture, but rather as having originated from all ancient cultures.

10.3.5 Multilinear Development Theory (Modern Perspective)

According to this theory iron was produced worldwide. The spreading of iron technology occurred as a result of diffusion and local innovation. The transition from bronze to iron occurred gradually. Therefore, This Multilinear Development Theory posits an independent and multi-centred development of iron paraphernalia across the globe. Accordingly, iron was developed at multiple locations, through parallel means and unique to the system of the locality in question. Factors included local resources, climatological conditions, and social need.

Many prior scholars supported the idea that iron was spread by way of a one-point origin, with a strong emphasis on the area of Anatolia and the Hittites as the birthplace of iron technology. However, discoveries from archaeological sites in India, China and Africa have shown this single-point origin to be incorrect, leading to the formation and establishment of the multilinear development model as a corrective approach acknowledging the multi-dimensional and diverse manner in which mankind developed technology.

According to the multilinear development model, iron was developed by societies independently, through experimentation with metallurgy. Societies that had already attained copper and bronze smelting developed the ability to master the furnace temperatures required to create iron from its ore faster than those societies which were relatively new to smelting. Although societies produced the same kinds of products, i.e., iron tools and weaponry, this similarity is not evidence of a one-point origin for iron technology but is indicative of similar technological responses to common material limitations.

Archaeological findings support this theory about the development of iron at independent areas. Early iron was found at several sites in India including Malhar, Raja Nala Ka Tila, and Atranjikhhera, as early as 1800–1500 BCE. In China, cast iron technology developed independently in the first millennium BCE, providing evidence that this technological path was separate to West Asia. The Nok culture of Sub-Saharan Africa illustrates their

own traditions of early iron production and smelting, all using different designs of furnaces, differing composition of the slag and differing metallurgical production methods, thus demonstrating that iron technology was not developed according to a common pattern.

The multilinear model establishes the importance of the factors of local environment and social conditions on the use of iron. Because regions of abundant iron ore, forest fuel, and valleys for agricultural production, would traditionally be faster to adopt iron than would be those of less abundant iron ore and also to a lesser extent of agricultural production than other regions. The combination of social pressures such as the need for additional agricultural land due to population growth, clearing forests to make land for agriculture, and the need for stronger tools and weapons for fighting created social conditions conducive to experimentation with iron. Therefore, the introduction of iron technology was not due solely to technology transfer but was also heavily shaped by sociocultural need or demand.

Another significant point of this multilinear model is that the production and use of iron developed over time and did not occur simultaneously. In many cases, iron and bronze co-operated for many years. Initially, iron was primarily considered a high-value item for ceremonial or decorative purposes before the widespread use of it for practical purposes. This evidence indicates that the development of iron technology was not a singular event, nor was it uniform in its extent, therefore indicating a unique path to the development of iron technology in all sociocultural groups represented.

The Multilinear Theory of Development incorporates both diffusion and interaction in relation to independent invention. It accepted the role of trade and culture as a means of spreading knowledge, but it did not deny that different regions adapted iron technology based on local conditions. Thus, while the multilinear model recognizes the role of diffusion in contributing to various forms of innovation, it places a higher priority on local innovation.

Because the scientific community accepted this theory as acceptable to modern historians and archaeologists, it avoids any Eurocentric or Western Asian bias regarding how human beings developed technology across societies through their creativity and respect for the uniqueness of regional technological histories.

Ultimately, the Multilinear Theory of Development presents the global transition to use of iron as both a complex process with regional variation as well as social necessity and environmental adaptation, providing both a balanced perspective and an accurate representation of how iron transformed various civilizations around the globe through historically different yet related ways.

Check Your Progress (CYP)/ Activity –II

Based on the understanding of the previous section, answer these questions in your own words:

Q1. Discuss the accidental discovery theory of iron.

Q2. Write a short note on the diffusion theory of advent of iron technology.

Q3. Fill in the blanks.

- (i) The theory that iron technology originated in Anatolia and was controlled by the _____ civilization is known as the Hittite monopoly theory.
- (ii) After the collapse of the Hittite Empire around _____ BCE, iron artifacts began to spread widely across West Asia and Europe.
- (iii) According to the _____ Discovery Theory, iron was first produced unintentionally during earlier copper and bronze smelting activities.
- (iv) The iron dagger found in the tomb of _____ is often cited as evidence that early iron was used as a status symbol.
- (v) The _____ Theory argues that iron technology spread from Western Asia to other regions through trade, migration, and warfare.

10.4 LET US SUM UP

To sum up, the discussion regarding the emergence of iron continues to be a lively and progressing area of historical and archaeological research. What was previously clarified via a straightforward diffusionist model—attributing a sole origin and swift dissemination—has now evolved into more sophisticated interpretations that acknowledge regional variety, several innovation hubs, and intricate patterns of technological exchange. Improvements in archaeological techniques, such as radiocarbon dating and metallurgical analysis, have substantially altered previous beliefs regarding timelines and origins.

The shift to iron was not consistent or immediate; instead, it was a slow and context-dependent process influenced by ecological factors, resource access, and socio-political frameworks. Although iron ultimately became revolutionary because of its availability and versatility, its initial application frequently coexisted with bronze, highlighting both continuity and transformation. Consequently, the term “Iron Revolution” should be viewed in a wider context of gradual technological development instead of sudden change.

In the Indian context, the discussion holds specific historiographical importance, as it connects with issues of local

development versus outside influence, the timeline of the Later Vedic era, agricultural growth in the Ganga plains, and the emergence of early states. The expanding collection of archaeological findings increasingly backs the perspective that iron technology in the subcontinent emerged in various regional settings, contesting previous diffusionist beliefs.

In the end, the discussion regarding the emergence of iron highlights a broader methodological insight for historians: technological advancements should not be analyzed separately but must be placed within their social, economic, and cultural contexts. With ongoing discoveries surfacing, the topic stays receptive to reinterpretation, illustrating the fluid character of historical research itself

10.5 GLOSSARY

Iron Age: The period succeeding the Bronze Age marked with widespread use of iron for tools and weapons.

Archaeometallurgy: The scientific study of ancient metal production, including iron smelting and forging techniques.

Iron Smelting: The process of extracting iron from ore by heating it in furnaces.

Bloomery Furnace: An early type of furnace used to smelt iron, producing a spongy mass called a bloom.

Diffusion Theory: The view that iron technology spread into India from regions such as West Asia.

Indigenous Development Theory: The argument that iron technology developed independently within the Indian subcontinent.

10.6 EXAMINATION ORIENTED QUESTIONS

- Q1. Explain the issue related to how iron was first discovered.
- Q2. Examine Hittite Iron technology development theory.
- Q3. Discuss the theory of independent invention of iron technology.

10.7 ESSON END EXERCISES

- Q1. Explain the core issues related to Iron age debate.
- Q2. Examine the different theories on the advent of iron.

10.8 ANSWER KEY

CYP-I

- Q1. Refer sub-section 20.2
- Q2. Refer sub-section 20.2
- Q3. (i) Hittite monopoly (ii) Accidental (iii) Technological (iv) Multilinear (v) Western

CYP-II

Q1. Refer sub-section 20.3.2

Q2. Refer sub-section 20.3.3

Q3. (i) Hittite (ii) 1200 (iii) Accidental (iv) Tutankhamun (v) Diffusion

10.9 SUGGESTED READINGS

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STAGE OF FOOD PRODUCTION

SEMESTER-I

UNIT : II

COURSE NO. : HIST104

LESSON : 11

ADVENT OF IRON: IT'S IMPLICATIONS CIVILIZATION IMPACT

11.0 Learning Objectives and Outcomes

11.1 Introduction

11.2 Iron:Technological Development

11.2.1 Emergence of Iron Technology

11.2.2 Iron Smelting and Metallurgical Techniques

11.2.3 Transition from Bronze to Iron Technology

11.3 Civilisational Impact

11.3.1 Economic Implications

11.3.2 Political and Military Implications

11.3.3 Environmental Impact

11.4 Let us sum up

11.5 Glossary

11.6 Examination Oriented Questions

11.7 Lesson End Exercises

11.8 Answer Key

11.9 Suggested Readings

11.0 LEARNING OBJECTIVES AND OUTCOMES

Learning Objectives

The objective of this lesson is to enable you to:

- explain the development of Iron technology.

- evaluate the economic, political and military impact of Iron technology.
- examine the transition from Bronze to Iron technology.
- identify the environmental impact of Iron technology.

Learning Outcomes

After going through the lesson, you will have a clear understanding about:

- the emergence of Iron technology.
- the economic, political and military impacts of Iron technology.
- the transition from Bronze to iron technology.
- the environmental impact of Iron technology.

11.1 INTRODUCTION

Dear learners, Iron represents a pivotal moment in human history, being the most significant invention made after both the Stone Age and the Bronze Age. With the discovery of iron and its widespread usage after the second millennium BC across much of the world, it revolutionized nearly all aspects of material culture, economics, warfare, agriculture and social organization. Iron is not only far more plentiful than copper or bronze but also, once smelting techniques were developed, produced materials that were much stronger for many applications (than copper / bronze). Thus, the introduction of irons also fundamentally changed the course of early civilizations.

In India, the earliest evidence for the presence of iron dates from around 1200–1000 BC, however, excavation of a number of sites throughout India has shown that some of these sites contain iron objects that may be much older than this date. Some examples of such sites would include Atranjikhhera, Hastinapur, Rajghat and Malhar; as they have produced several iron objects that indicate a shift in technology to an increasing reliance on iron. Iron was introduced into India with the introduction of iron tools like axes, ploughshares, sickles, and weapons; and these tools played an important part in creating large amounts of cleared land in the forests of Northern India, allowing them to expand agricultural production, and ultimately establish settlements in the fertile lands of the Gangetic plains. The consolidation of agricultural lands into larger communities involved in producing surplus agricultural product and trade led to the establishment of Mahajanapadas and established the first steps towards state formation.

In addition to transforming the economy through iron technology, agricultural expansion resulting from iron tools also increased the productivity of agriculture and enabled the accumulation of food surpluses. Food surpluses helped to enable greater levels of urbanization, the development of trading networks, and occupational specialization.

Iron's introduction into society had a tremendous social impact. As agrarian communities expanded, settlement patterns transformed, and unequal distributions of wealth were heightened. Control of iron production and

distribution likely played a role in the establishment of fledgling societies and governments. In many places, the Iron Age was marked by the creation of new methods of expressing culture, new rituals associated with death, and new technologies, such as megaliths, in South India.

Internationally, the Iron Age represents a period during which societies changed from having been based on Bronze to building widespread agrarian and militaristic societies. In many parts of the world including, Anatolia, the Near East, Africa, and Europe, the use of iron was tied to state expansion and economic restructuring. Thus, the arrival of iron represents not only a new technology but also a catalyst for the transformation of civilization.

To historians and archaeologists, the study of Iron Age technology is not limited to metallurgy; iron represents a stimulating area for debate concerning diffusion vs. independent invention, ecological effects, economic redesign, and state development. To fully understand the social, economic, political, and cultural transitions in early cultures, a comprehensive understanding of the developments of iron is necessary.

11.2 Iron: Technological Development

Iron has significantly contributed to the technological advancements that humans have undergone since time immemorial. It was first used during the Iron Age around 1200 BCE –when the extraction process of iron was discovered. Iron proved to be stronger, more durable and readily available compared to the bronze.

11.2.1 Emergence of Iron Technology

The rise of iron technology represented a significant turning point in human civilization; referred to as the start of the Iron Age, it differed from copper and bronze as it was far more common, yet still much harder to refine/machine for finished products, thus, the adoption of iron occurred slowly through experimentation, environmental conditions, commerce, and the political aspects surrounding early forms of government and rule.

Iron's earliest recorded use was in the 3rd millennium B.C.E, when small amounts were fashioned from meteorites (beaded meteorite materials were discovered in grave sites in Gerzeh in Egypt about 3200 B.C.E). The development of what we might consider true iron technology (e.g., the smelting of iron ore) occurred later than this initial use of iron. At the beginning of systematic production of iron, evidence found in archeological digs shows that this production took place in Anatolia around the 2nd millennium B.C.E and was largely reminiscent of the Hittite civilization c. 1600-1200 B.C.E.; however, earlier academic works tended to over-exaggerate Hittite control of iron; nonetheless, these people were key players in the further improvement of the technology of smelting.

Due to the much higher melting point of iron (1538°C) as opposed to that of brass or copper, the early iron craftspersons were not able to smelt iron completely. Instead, they produced a porous block (bloom) by applying a method of smelting iron to produce the aforementioned porous mass known as 'bloom.' This bloom was heated and hammered multiple times to remove impurities. The creation of furnaces that could reach high temperatures was a key technological breakthrough.

Iron technology spread after the fall of major Bronze Age civilizations around 1200 BCE. The decline of cities in

the eastern Mediterranean, such as Mycenaean Greece and the Hittite Empire, disrupted trade networks that provided tin, a vital ingredient in bronze. As tin grew scarce, communities began using iron, which was more plentiful. Therefore, the shift to iron was partly motivated by economic need.

11.2.2 Iron Smelting and Metallurgical Techniques

The arrival of iron marks a major technological change in human history. Unlike copper and bronze, iron is rarely found in its pure form and needs complicated methods to extract it from ore. The development of iron smelting and metallurgical techniques shows a significant progress in scientific knowledge, experimentation, and specialized craft skills during the early historic period.

- (i) **Iron Ore and Early Discovery:** Iron ores like hematite (Fe_2O_3), magnetite (Fe_3O_4), and laterite were found in many regions worldwide. In India, key early iron-bearing areas included the Chotanagpur plateau, Vindhya, Deccan, and parts of South India. Knowledge of copper smelting likely helped lay the groundwork for experimenting with iron ores. However, iron needs much higher temperatures (over 1100°C) than copper or bronze, which made its extraction technically difficult.
- (ii) **The Process of Iron Smelting:** Early iron was produced using the bloomery process, not by fully melting the iron (since pure iron melts at about 1538°C , a temperature too high for early furnaces). Instead, iron ore was heated with charcoal in a furnace that had a steady air supply, usually delivered by bellows. The charcoal served both as fuel and as a reducing agent, removing oxygen from the iron ore through a chemical reduction process.

This created a spongy mass called a bloom, which contained iron mixed with slag (impurities). This bloom was repeatedly hammered while hot to remove slag and compact the metal. This method is known as forging or smithing. The final product was wrought iron, which was relatively soft but strong and workable.

- (iii) **Furnace Technology and Tools:** Early furnaces were small shaft furnaces made of clay, often built partly underground to retain heat. Archaeological sites in India like Atranjikhra, Gufkral, and Hallur have provided evidence of furnaces, slag heaps, tuyeres (clay pipes for air supply), and iron tools. The introduction of bellows greatly improved combustion efficiency and temperature control, marking an important step in metallurgical technology.

Producing iron required organized labor and access to raw materials—ore, charcoal (from forests), and water. This led to the rise of specialized iron-working communities and proto-industrial zones.

- (iv) **Carbon Content and Steel Production:** One major metallurgical breakthrough was recognizing how carbon strengthens iron. When iron absorbed small amounts of carbon during heating with charcoal, it became steel, which was harder and more durable than wrought iron. Ancient Indian metallurgists became especially known for creating high-quality steel, particularly wootz steel, which later became famous internationally and was exported to West Asia. The famous Iron Pillar of Delhi (4th century CE) showcases

advanced knowledge of forging and resistance to rust. Its rust-resistant features show high phosphorus content and exceptional forging techniques, reflecting a high level of metallurgical skill.

11.2.3 Transition from Bronze to Iron Technology

The shift from Bronze to Iron technology represents a major change in human history. It was not just a different metal being used; it transformed economic systems, warfare, agriculture, social organization, and how states formed. This change happened gradually between the second and first millennia BCE in various regions, especially in West Asia, the Mediterranean, South Asia, and parts of Africa and Europe.

Bronze, an alloy of copper and tin, was the main metal in early metallurgy due to its relatively easy production. Copper melts at around 1085°C, and bronze melts at slightly lower temperatures, which made them workable with early furnaces. Bronze tools and weapons were stronger and lasted longer than stone and copper ones. However, making bronze relied on tin, which was a pretty rare resource. This uneven distribution of tin led to long-distance trade networks and economic ties between regions. Civilizations like Mesopotamia, Egypt, the Indus Valley, and the Mycenaean world thrived during this time.

Several factors contributed to this transition:

- (i) **Resource Availability:** Iron ore was easier to find than tin, which decreased the need for long-distance trade.
- (ii) **Technological Improvement:** Better furnace designs and forging methods made iron production more efficient.
- (iii) **Political and Economic Changes:** The collapse of Bronze Age trade systems around 1200 BCE interrupted tin supplies, prompting experimentation with locally available iron.
- (iv) **Military Edge:** Once refined, iron weapons were stronger and could be produced in larger amounts, giving military advantage.

Check Your Progress (CYP) –I

Based on the understanding of the previous section, answer these questions in your own words:

Q1. Describe the iron smelting and metallurgical techniques.

Q2. Write a short note on the factors contributed to the transition from Bronze to Iron technology.

Q3. Fill in the blanks.

- (i) Iron ores such as _____ (Fe_2O_3) and _____ (Fe_3O_4) were widely used in early iron production.
- (ii) Early iron was produced using the _____ process rather than completely melting the metal.
- (iii) The spongy mass of iron and slag obtained from the furnace is called a _____.
- (iv) The famous _____ (4th century) demonstrates advanced knowledge of rust-resistant iron technology.
- (v) The collapse of _____ Age trade networks around 1200 BCE disrupted tin supplies and encouraged the use of iron.

11.3 CIVILISATIONAL IMPACT

Introduction of iron in the life of human beings brought far reaching civilization impact in their life. The new tools made out of iron were superior in nature compared to the tools made of stone or bronze. The improvements in the quality of agricultural equipment, such as the plough, helped in clearing of thick forests in order to cultivate crops. More food could be produced, leading to population growth and the development of civilizations.

It also improved the weapons used in the field of warfare. Swords, spearheads, armor, and other types of weapons were more efficient compared to their bronze counterparts used earlier. The arrival of iron marked the beginning of new changes, helping to develop civilizations.

11.3.1 Economic Implications

The rise of iron technology represents a key economic shift in ancient history. The widespread use of iron tools and weapons, especially from the late second millennium BCE in regions like Anatolia, Mesopotamia, India, and parts of Europe, changed how people produced goods, exchanged them, and organized their societies.

- (i) **Agricultural Expansion and Intensification:** One of the biggest effects of iron technology was on agriculture. Iron tools like ploughshares, sickles, hoes, and axes were stronger, sharper, and more durable than those made of bronze or stone. This allowed farmers to clear thick forests and farm heavy soils that were hard to work with before. In early historic Ganga Valley, iron ploughshares enabled large-scale forest clearing, which led to more wet-rice farming. Higher agricultural productivity created food surpluses, supporting population growth and urbanization. Surplus production also allowed for the rise of non-producing groups like artisans, traders, administrators, and religious specialists. So, iron technology established the economic base for complex state formation.

- (ii) **Growth of Craft Production and Specialization:** The introduction of iron encouraged craft specialization. Iron smelting and forging needed technical skills, organized labor, and access to raw materials. The rise of specialized ironworkers, known as smiths, helped diversify job roles. Unlike copper and tin used for bronze, iron ore was more widely available. This reduced reliance on long-distance trade for raw materials and led to more localized production centers. The relative abundance of iron made tools easier to access, boosting productivity in areas like carpentry, pottery, and construction. This trend also paved the way for guild-like organizations in later periods, especially in early historic India, where craft specialization became closely tied to urban economies.
- (iii) **Expansion of Trade Networks:** Iron technology impacted trade in several ways. First, improved agricultural output increased the amount of goods available for trade. Second, iron tools improved transport infrastructure; stronger carts, wagons, and ship components enhanced mobility. Third, iron weapons allowed for territorial expansion and political consolidation, which created larger and more stable markets. In regions like the Mediterranean and Northern Black Sea, iron production and trade became crucial for interregional trade networks. In South Asia, archaeological sites related to Painted Grey Ware (PGW) and Northern Black Polished Ware (NBPW) cultures show increased commercial activity linked to iron use.
- (iv) **Urbanization and State Formation:** The economic changes brought by iron led directly to urbanization. Surplus production, job specialization, and broader trade networks spurred the growth of towns and cities. In northern India, the rise of the Mahajanapadas during the first millennium BCE closely matched the iron-driven agricultural growth of the Ganga plains. Iron weapons also made emerging states stronger by improving military efficiency. Political consolidation under more powerful kingdoms led to better tax collection and administrative control, further boosting economic integration.
- (v) **Social Stratification and Property Relations:** The increased productivity from iron tools changed property relations. Control over land and agricultural surplus became a main source of wealth. This created sharper social hierarchies and class distinctions. Land-owning elites, warrior classes, and ruling powers gained economic influence, while dependent labor grew in agrarian economies.

11.3.2 Political and Military Implications

The arrival of iron technology is one of the most significant changes in human history. It deeply impacted political structures and military organization in ancient civilizations. The shift from the Bronze Age to the Iron Age did not just introduce a new metal; it changed power dynamics, reshaped state formation, and redefined warfare strategies.

- (i) **Democratization of Weaponry and Shift in Power:** Unlike bronze, which needed tin—a scarce and limited resource—iron ore was much more available. This greater access reduced the reliance on long-distance trade networks that supported Bronze Age elites. As a result, iron production was not limited to a few privileged areas. The widespread availability of iron weapons let more people arm themselves, changing the military organization from elite chariot-based warrior classes to larger infantry armies. For instance, in the ancient Near East, the rise of the Assyrian Empire closely connected to its use of iron

weaponry. Iron swords, spears, and armor improved the effectiveness of Assyrian armies, enabling systematic territorial growth and the formation of one of the earliest military empires.

- (ii) **Expansion of Territorial States and Empires:** Iron tools supported agricultural expansion by allowing the clearing of forests and cultivation of heavier soils. Increased agricultural output led to population growth and surplus production, which in turn funded standing armies and bureaucratic administrations. This economic foundation was key to the rise of large territorial states. In the Indian subcontinent, the spread of iron technology in the Gangetic plains helped create powerful mahâjanapadas and later empires like Magadha. Iron axes and ploughshares supported agrarian growth in the middle Gangetic basin, creating the surplus necessary for military campaigns and centralized governance. Thus, iron technology indirectly aided political centralization by solidifying the material foundations of state power.
- (iii) **Transformation of Military Strategy and Organization:** Iron weapons were stronger and more durable than bronze, leading to major changes in warfare. The focus shifted from chariot warfare, typical of Bronze Age aristocracies, to infantry-based armies armed with iron swords, shields, and spears. This change promoted new kinds of military discipline and organization. In the Mediterranean, iron weaponry helped create heavily armed infantry formations like the hoplite phalanx in ancient Greece and later the Roman legion. The growth of the Roman Republic was closely tied to its disciplined legions equipped with iron weapons, which allowed Rome to control the Italian peninsula and eventually the Mediterranean. Iron also enhanced siege warfare. Stronger tools and weapons made it easier to build fortifications and to break through them. This increased interstate conflicts and pushed for more advanced military engineering.
- (iv) **Decline of Bronze Age Political Systems:** The spread of iron technology is often connected to the collapse of several Bronze Age civilizations around the 12th century BCE. As iron weapons became widespread, previously powerful states that depended on bronze military systems lost their advantage. The breakdown of older trade networks and political systems created space for new powers focused on iron-based military strength. This technological shift contributed to a reorganization of political authority, often favoring militarized states with efficient production systems. The political and military consequences of the rise of iron were significant. Iron made weapons more accessible, supported agricultural growth, strengthened territorial states, transformed military organization, and changed geopolitical balances. For historians, iron technology should be viewed not just as a metallurgical advancement but as a driving force in the development of early empires, state formation, and organized warfare.

11.3.3 Environmental Impact

The shift from bronze to iron technology, known as the Iron Age, was a significant moment in human history. While much attention has been given to its social, economic, and political effects, its environmental impacts were also deep and transformative. The move to iron changed how ancient societies interacted with nature, reshaping landscapes through resource extraction, energy use, and ecological change.

Iron technology needed a large amount of raw materials. Unlike bronze, which is a mix of copper and tin and relies on two separate minerals often found in distant places, iron is abundant and widely available. This availability

quickly increased mining activities across Europe, Asia, and Africa. Forested hillsides were cleared to access iron ore deposits, and water systems were redirected for ore processing. This early mining disrupted soils, increased erosion, and led to sediment buildup in rivers, harming aquatic ecosystems.

Another major environmental impact was deforestation. Smelting iron requires high temperatures, and early furnaces burned charcoal as fuel. Making charcoal involved slowly burning wood in low-oxygen conditions, which consumed a lot of timber. As iron production spread, the demand for wood rose, leading to extensive clearing of woods. The studies show a significant reduction in the tree cover pattern started around 1000 BCE in the areas such as central and northern Europe. This loss of forests reduced biodiversity, changed local climates, lowered soil fertility, and increased the risk of flooding.

Air pollution also became a side effect of iron production. Early smelting released smoke filled with carbon monoxide and particulates. While these emissions were mainly localized, they worsened air quality around production sites and could have harmed human health and plant life. Charcoal production itself added carbon to the atmosphere. Although this was small by later standards, it marked one of the earliest human-driven changes to air quality.

The spread of iron tools changed how people used land. Iron axes, plows, and hoes were stronger and more effective than those made of bronze or stone. This allowed larger areas of land to be cleared for farming in shorter timeframes. As more land was cultivated, secondary forests and wildlands were turned into fields. While this supported population growth and economic expansion, it also led to soil depletion and changed water patterns. In regions with fragile soils, over-farming resulted in erosion and long-term declines in agricultural productivity.

On waterways, iron technology led to heavier tools and structures like plows and digging implements, enabling farmers to adjust irrigation systems and drainage patterns. These changes increased agricultural yields but also disrupted wetland ecosystems and river habitats, affecting fish and bird populations.

It is crucial to put these impacts in context. Compared to later industrial periods, the environmental effects of ancient iron production were limited in scope. However, in its historical context, the rise of iron technology marked one of the first times humans triggered widespread and lasting changes to the environment. It established patterns of resource extraction, energy use, and landscape transformation that would grow more intense over the centuries.

Check Your Progress (CYP)–II

Based on the understanding of the previous section, answer these questions in your own words:

Q1. Describe the economic implications of early use of iron.

Q2. Examine the environmental impact of early use of iron.

Q3. Fill in the blanks.

- (i) The rise of the _____ Empire in the ancient Near East was closely connected to its effective use of iron weaponry.
- (ii) In the Indian subcontinent, the spread of iron technology in the _____ plains contributed to the rise of powerful mahajanapadas.
- (iii) Iron weaponry in ancient Greece contributed to the development of the heavily armed infantry formation known as the _____ phalanx.
- (iv) Smelting iron required large quantities of _____, which led to extensive deforestation.
- (v) Around _____ BCE, several Bronze Age civilizations declined, partly associated with the spread of iron technology.

11.4 LET US SUM UP

The introduction of iron heralded a period of great change for humankind by permanently altering the course of established civilization in the Old World and dominating metallurgy previously based on copper and/or bronze with easily accessible raw materials, allowing much greater access for the masses to stronger tools and weapons. Iron's raw materials were relatively plentiful compared to their predecessors, leading to broader accessibility to populations around the globe. The adoption of iron technology created structural changes across the economy, society, politics and cultures of the places where iron was utilized; these changes were not only due to the introduction of an improved technology but rather more impactful than the technology itself.

From an economic standpoint, farmers achieved unprecedented levels of agricultural productivity as direct result of using iron agricultural tools. The introduction of iron plough points, sickles, axes and hoes allowed farmers to clear previously densely wooded areas and cultivate fertile but hard to work soil — particularly in the Gangetic plains of India, parts of sub-Saharan Africa and Europe. As agriculture expanded into these new areas, the overall population grew rapidly; farmers produced more than they could eat leading to market systems of exchanging surplus product to the point of facilitating the consolidation of rural economies — many of which became the foundations upon which urban centres developed.

From a political perspective, warfare and state formation changed dramatically through the use of iron weaponry and developed much faster than those societies without iron weapons. Societies that possessed iron weaponry

were able to use their superior military technology to achieve larger territorial boundaries than previously believed possible; with the expansion of their territorial boundaries, these states incorporated previously independent states into their own and consolidated into larger political entities. A great example is the emergence of the Mahajanapadas in India.

The Iron Age saw the increasing social role division, with blacksmiths and metal workers becoming integral parts of the community and developing distinct social and ritual rank. Increasing trade routes developed to supply blacksmiths and metal workers with iron to create tools and weapons, resulting in more interregional interaction.

The changes in iron tool and weapon use also reflected the changes in settlement patterns, where villages became more permanent and cities/forts developed in response to improved tools and new defensive measures.

Iron's use also changed cultural and ideologic practices through changes in rituals, mythologies, and symbolism. In several cultures, iron was associated with strength and power and transformation. Through archaeological evidence (such as iron tools in graves), it is possible to see the rise of iron as a material that gave a person status and identity, not only as an item of utility.

The adoption of iron was not uniform throughout the world but developed via environmental conditions, trade patterns, and human interactions. Newer technology often coexisted with older technologies, rather than replace them at once.

11.5 GLOSSARY

Carburization :process of heating iron in the presence of a carbon-bearing material such as charcoal in order to harden the metal.

Meteor :small rocky or metallic bodies in outer space.

Meteoric iron :iron found in meteorites.

Ore :a natural rock or soil from which a metal or mineral can be extracted.

Quenching :the process of heating and rapidly cooling a metal with water, oil, forced air or inert gases in order to obtain certain material properties such as hardening of the metal.

Smelting :process of applying heat beyond the melting point to an ore to melt out a pure metal.

Tempering :process of reheating iron to harden and strengthen it.

Terrestrial iron :iron that is available on the upper layer of the earth.

11.6 EXAMINATION ORIENTED QUESTIONS

Q1. Explain the advent of iron technology.

Q2. Examine the implications of iron use in early state systems and the expansion of empires.

Q3. Describe the political and military implications of early use of iron.

11.7 LESSON END EXERCISES

Q1. Explain the early development of iron technology.

Q2. Examine the civilisational impact of early use of iron.

11.8 ANSWER KEY

CYP-I

Q1. Refer sub-section 11.2.2

Q2. Refer sub-section 11.2.3

Q3. (i) Hematite; Magnetite (ii) Bloomery (iii) Bloom (iv) Iron Pillar of Delhi (v) Bronze

CYP-II

Q1. Refer sub-section 11.3.1

Q2. Refer sub-section 11.3.3

Q3. (i) Assyrian (ii) Gangetic (iii) Hoplite (iv) Charcoal (v) 1200

11.9 SUGGESTED READINGS

- The Early History of Metallurgy in Europe – H. H. Coghlan
- The Coming of the Age of Iron – Jane C. Waldbaum
- The Archaeometallurgy of the Asian Old World – Benjamin W. Roberts & Christopher P. Thornton (eds.)
- Metals and Metallurgy in Ancient India – O. P. Bhardwaj
- Ancient Indian Metallurgy – R. Balasubramaniam
- Iron and Steel in Ancient Times – Radomír Pleiner
- The Rise of Civilization in India and Pakistan – F. R. Allchin
- The Origins of Metallurgy in India – Dilip K. Chakrabarti
- Metals Make the World Go Round – Hugh Graham
- A History of Metallurgy – R. F. Tylecote

STATE AND EMPIRE

SEMESTER-I

COURSE NO. HIST104

UNIT-III

LESSON 12

ANCIENT GREECE

STRUCTURE

- 12.0 Learning Objectives and Outcomes**
- 12.1 Introduction**
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- 12.3 Ancient Greece: Early Civilisations**
 - 12.3.1 The Minoan**
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- 12.5 Classical Period: Emergence of Greek Political Structures**
 - 12.5.1 Democracy in Athens**
 - 12.5.1.1 Athenian Imperialism**
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- 12.6 End of Classical Period**
- 12.7 Let us sum up**
- 12.8 Glossary**
- 12.9 Examination Oriented Questions**
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12.11 Answer Key

12.12 Suggested Readings

12.0 LEARNING OBJECTIVES AND OUTCOMES

Learning Objectives

The objective of this lesson is to enable you to:

- Understand the Ancient Greek Political Structure.
- Learn about the Minoan and Mycenaean Civilisations.
- Explain the meaning and emergence *Polis*.
- Examine the Political features of Athens and Sparta.

Learning Outcomes

After going through this lesson, you will have clear understanding of:

- Terms such as *Polis*, Democracy, Tyranny etc.
- The various phases of Political growth in Athens and Sparta.
- The Geographical spread of Ancient Greece.
- Bronze Age Civilisations of Minoan and Mycenaean.

12.1 INTRODUCTION

Dear Learners,

Ancient Greece was unique in a way that, despite being the centre of a great civilisation, it never developed into a large empire or a unified territorial state. Its most significant phase was the Classical Age (c. 500–338 BCE), which ended with the Macedonian conquest of the Greek states and represented the culmination of a long historical development. The earliest phase of Greek civilisation began on the island of Crete with the Minoan Civilisation (c. 2000-1400 BCE), the first Bronze Age civilisation in Europe. It was followed by the Mycenaean Civilisation on mainland Greece (c. 1600-1200 BCE). Chronologically, Greek civilisation is divided into two broad phases: Early Greek Civilisation-including the Minoan, Mycenaean, and the Dark Age-and the Archaic and Classical periods. Before studying this evolution, it is essential to understand the geographical features of Greece.

12.2 ANCIENT GREECE: GEOGRAPHICAL SPREAD

Ancient Greece covered a much larger area than the present-day Greek state. In antiquity, the Greek world included western Anatolia, Thrace, the Aegean islands, Crete, Cyprus, mainland Greece, and parts of southern

Italy and Sicily. Geographically, it was an irregular peninsula in southeastern Europe, bordered by the Ionian Sea to the west, the Aegean Sea to the east, and the Mediterranean Sea to the south. The southern part of the peninsula, known as the Peloponnese, extended into the Mediterranean like a palm. It was almost an island, separated from the mainland by the Gulf of Corinth and connected by a narrow strip of land where the city of Corinth was located. East of this strip lay Attica, a region surrounded by the Aegean Sea, where Athens was situated. Crete lay south of the Peloponnese and the Cyclades, while Greek settlers also established colonies in southern Italy and Sicily, known collectively as the Western Greeks.

12.3 ANCIENT GREECE: EARLY CIVILISATIONS

12.3.1 The Minoan

The Minoan Civilisation (c. 3000–1000 BCE) is regarded as the earliest Bronze Age civilisation of Europe. It developed on the island of Crete, the largest island in the Aegean Sea, situated in the eastern Mediterranean between mainland Greece and Anatolia (modern Turkey). By approximately 3000 BCE, Crete and mainland Greece had developed advanced metallurgical practices, producing artefacts in bronze, gold, and silver. According to Colin Renfrew (2011), the growth of bronze technology in the Aegean was closely linked to expanding maritime trade networks that reached Anatolia, a region abundant in copper resources. Crete's geographic position as an island endowed with numerous natural harbours facilitated maritime exchange and communication. This strategic advantage contributed to the emergence of some of Europe's earliest proto-urban settlements.

In 1900, the British archaeologist Sir Arthur Evans began systematic excavations at Knossos on Crete's northern coast. His work led to the discovery of an extensive architectural complex, which he identified as the "Palace of Minos," naming it after the legendary Cretan ruler associated with the myth of the labyrinth and the Minotaur. Evans adopted the term "Minoan" for the civilisation, although the designation had previously been used by the German historian Karl Hoeck in 1823 in his *History of Crete* (Lobell, 2015: 28).

Material remains suggest that the Minoans were accomplished seafarers and active participants in long-distance trade. They maintained commercial relations with Egypt and the Near East (West Asia), exporting timber, textiles, agricultural produce, and possibly olive oil in exchange for gold, silver, tin, ivory, and copper. They also achieved notable proficiency in pottery production, metalworking, engraving, and the carving of stone vessels—craft traditions that became hallmarks of Minoan artistic expression and important export commodities for centuries. The palaces functioned as redistributive centres, collecting and reallocating agricultural surplus. Palatial authority extended into rural areas through villas that acted as administrative sub-centres, overseeing agricultural production. Linear B tablets from Knossos record large-scale sheep and wool management, indicating possible palace monopoly over wool production. Wool likely served as a key export in exchange for copper, ivory, and gold.

The social structure of the Minoans was organised into villages, towns, provinces, and major palatial centres spread across Crete. Although the palaces were dominant institutions, the identity of the ruler remains uncertain. They likely emerged through powerful families who unified large territories and established dynasties. Below the palace, authority was held by high officials who supervised agriculture and administration, possibly residing in countryside

villas. These officials may have belonged either to the ruling lineage or to influential independent families. Priests and priestesses likely held significant roles, while merchants engaged in overseas and internal trade also occupied an important position in society. Craftsmen operated at various levels, from palace-dependent artisans to independent workshop owners in towns. As an agrarian society, the majority of the population consisted of farmers, herdsman, and agricultural labourers. Archaeological evidence further suggests strong communal traditions.

The Post-Palatial period (1450-1100 BCE) marks the phase of decline of the Minoan civilisation. Although archaeological evidence indicates that fire was the immediate agent of devastation at many sites, its underlying cause remains debated. Scholars have proposed multiple explanations for the collapse. Some attribute it to the eruption of the volcano on Thera, while others suggest catastrophic earthquakes. Still others argue for foreign invasion as the primary cause. The explanation most widely accepted today attributes the decline to a combination of earthquakes and the far-reaching consequences of the massive volcanic eruption on the nearby island of Thera. The eruption occurred in the early Late Bronze Age, though scholars continue to debate whether it took place around 1500 BCE or closer to 1450 BCE.

Although Knossos continued for some years but around 1375 BCE, it was destroyed by fire, possibly at the hands of the Mycenaeans. By this stage, the centre of power in the Aegean had shifted to mainland Greece, where Mycenaean civilisation reached the height of its influence (Fagan & Durrani, 2019: 373).

12.3.2 The Mycenaean

The Mycenaean civilisation flourished on the Greek Mainland between c. 1600-1100 BCE. The name Mycenaean originates from 'Mycenae', a prominent citadel on the Peloponnese and was excavated first by Heinrich Schliemann in 1876-77. Excavations have uncovered *megarons* or King's halls, *tholos* or tombs, and elite graves laden with gold. Geographically, located at the crossroads of the Aegean and the Near Eastern regions, Mycenaeans flourished economically and socially. They built upon the culture and economy of the Minoans and developed militarily too. Decipherment of Linear B by Ventris confirms that the Mycenaeans spoke an early form of Greek, an Indo-European language. Mycenaean civilisation emerged and expanded in three phases:

Early Phase (2000-1600 BCE):

Greek-speaking groups settled on the mainland and established centres such as Mycenae. Agriculture became the main economic activity, leading to population growth and social stratification. Trade expanded, especially with the Minoans and a more hierarchical social structure began to emerge.

Middle Phase (1600-1400 BCE):

After the eruption of Thera weakened Minoan power, Mycenaean influence increased. Rich burial sites indicate the rise of powerful warrior elites. Chariots appeared around 1600 BCE, and by the 15th century BCE monumental tholos tombs were constructed. By 1450 BCE, the Mycenaeans had taken control of Knossos, while Miletus and Rhodes became important centres.

Late Phase (1400–1200 BCE):

Mycenaean civilisation reached its height during this period. Although heavily influenced by Minoan culture, the Mycenaeans dominated Crete. Hittite records refer to them as Ahhiyawa, likely linked to the term “Achaean.” They maintained contacts and conflicts in Anatolia and had direct trade relations with Egypt.

The Mycenaean palace system functioned as a highly organised social, military, and economic institution that concentrated power and wealth in the hands of the elite. Evidence from Linear B tablets found at Knossos and Pylos reveals its administrative structure. At the top stood the *wanax* (king or lord), followed by high-ranking officials such as the *lawagetas* (likely a military leader or heir), *telestai* (possibly landholding elites or religious officials), and *korete* (regional governors). These officials managed production, taxation, and defense, holding land from the wanax in exchange for service. A warrior group known as the *hequetai* formed the military class, while villages were supervised by local officials called *basileis*.

The palace operated as a centralised hub of production and record-keeping. Skilled workers-masons, potters, carpenters, metalworkers, and goldsmiths-laboured under elite supervision, while scribes meticulously recorded goods and resources. Textile production, largely carried out by women, was a major industry. The Mycenaeans traded ceramics, metal goods, and textiles, importing luxury items, spices, copper, and tin through extensive Mediterranean networks.

Soon after 1200 BCE, within perhaps two generations, the powerful Mycenaean world collapsed dramatically. Palaces across central and southern Greece, from Thessaly to the Peloponnese, were destroyed by fire and never fully rebuilt. Major centres such as Mycenae and Tiryns made brief attempts at recovery but were soon destroyed again. Knossos also fell during this period. By around 1100 BCE, many Mycenaeans abandoned fertile regions of Greece and migrated eastward and westward. They left behind ruined palaces and a political and cultural vacuum, ushering in a period often described as the Greek “Dark Age,” whose causes remain debated.

Check Your Progress (CYP)-I

A. Multiple Choice Questions:

1. Crete island is located in
 - (a) Mediterranean Sea
 - (b) Aegean Sea
 - (c) Black Sea
 - (d) Ionian Sea
2. Who began excavation of the Minoan civilisation
 - (a) Sir Arthur Evans

- (b) Collin Renfrew
 - (c) Karl Hoeck
 - (d) Nanno Marinatos
3. Minoans were named so after
- (a) King Menander
 - (b) King Minos
 - (c) King Alexander
 - (d) King Darius
4. Which site of the Minoan civilisation was discovered first
- (a) Phaistos
 - (b) Malia
 - (c) Knossos
 - (d) Zakros
5. Post-Palatial period of Minoan Civilisation corresponds to
- (a) 1450-1100 BCE
 - (b) 1100-900 BCE
 - (c) 1300-700 BCE
 - (d) 1700-600 BCE

12.4 TRANSITION TO CLASSICAL PERIOD

12.4.1 The Dark Age

The Dark Age of Greece lasted for nearly four centuries, ending around 800 BCE. During this period, the great Greek epics *Iliad* and *Odyssey*, attributed to Homer, were likely composed. These works marked an important turning point in Greek history as they reintroduced written sources after a long gap. As part of the epic poetry tradition, they provide insights into contemporary religion, mythology, beliefs, food habits, and clothing.

Historians divide the Dark Age into two phases: 1200-1050 BCE and 1050-800 BCE. The first phase saw the decline of Mycenaean cities, widespread depopulation, and the collapse of the centralised palace economy. The Linear B script disappeared around 1200 BCE, and long-distance trade declined, making copper and tin difficult to obtain. The causes of this widespread disruption remain debated.

By about 1000 BCE, a gradual recovery began. Greek-speaking tribes spread across the peninsula, the Aegean

islands, and the western coast of Anatolia. Iron technology was introduced, marking the beginning of the Iron Age and contributing to economic and social revival between 1050 and 800 BCE. By the end of the Dark Age, writing reappeared in Greece with the adoption of the Phoenician's phonetic script, which the Greeks modified into their own alphabet and later used in recording Homer's epics.

12.4.2 The Archaic Period

The period after the Dark Age is known as the Archaic Period (c. 800-500 BCE), during which the foundations of the Classical Age (500–338 BCE) were laid. Although historians distinguish these phases, the transition between them was gradual, with many social, economic, and cultural developments overlapping. Together, they are broadly referred to as Ancient Greece.

Before the emergence of historical records, local monarchies were replaced by tribal aristocracies, and cities developed under the control of noble elites. Aristocratic rule in the Archaic period coincided with the revival of long-distance trade with Syria and the eastern regions. Coinage, first introduced in Lydia in the 7th century BCE, and the adoption of an alphabet derived from the Phoenicians also appeared during this time. Urbanisation expanded rapidly across the Mediterranean and the Black Sea, and by the mid-6th century BCE nearly 1500 Greek cities existed both in the Greek homeland and overseas.

Although the exact political structures of these cities are not fully known, they were generally dominated by hereditary aristocracies that governed through exclusive councils. This system began to weaken in the late Archaic Age with the rise of tyrants (c. 650-510 BCE), whose rule contributed to the political transformations that eventually led to the development of the classical polis. Top of Form

12.4.3 Emergence of *Polis*

The Greek word *polis* (plural *poleis*), from which the term *political* is derived, originally meant a 'self-governing state'. Since these states were small in both area and population, they are commonly described as city-states. The polis represented a new form of political organisation, particularly in societies with class divisions, and was the main political unit of ancient Greece.

The forms of government among the poleis varied widely, ranging from oligarchies to the developed democracy of Athens. By the beginning of the Classical Period, Athens and Sparta had become the most prominent city-states. Most historical information survives about Athens, followed by Sparta.

Greek democracy was direct democracy, unlike modern representative systems. Instead of electing representatives to govern, citizens directly participated in decision-making through the people's assembly (*ecclesia*), the central institution of the democratic system.

In the Greek poleis, political equality was maintained with strict social justice to all the inhabitants during the Archaic Age. This however could not be maintained for long as economic inequality emerged with economic transformation by the end of Archaic Age. Distinct changes came in rural sector where landed aristocracy prospered at the cost of *hektemoroi* (Landless peasants). The nomadic pastoralists shifted to settled communities, long

distance trade increased, technology advanced and metallurgy and ceramic production grew. As warfare increased, new innovations were made where along with hoplite tactics, new warrior class emerged. Specialised armours such as *hoplon*, breastplate, helmet, wrist and leg guards, and other protective equipments were invented with other weapons. Hoplites formed the major part of the army and their status upgraded. With these newly raised social statuses, the demand for equal political rights among the communities also increased. This led to increase in social tension among various classes extending to demand for equality in political rights too, where monopoly of the aristocracy over decision-making was challenged.

It is presumed that most of the other city-states followed either Athens or Sparta in its institutional developments and thus surveying through these two poleis will give us some general idea about the others.

12.5 CLASSICAL PERIOD: EMERGENCE OF GREEK POLITICAL STRUCTURES

12.5.1 Democracy in Athens

With the increasing population and the expansion and disruption of the archaic economy provoked grave social tensions among the poorest class. These classes were more exposed to new stresses and uncertainties emerging out of conflict between the tyrants and the traditional nobility. In their desperation the small landholders, and landless peasants and farmers revolted against the landed aristocracy. People demanded for land redistribution and debt cancellation since most of the new lands were captured by the nobility and people were enslaved if unable to clear debt. The constant upheavals and social tension caused by these struggles reached a point of crisis by c. 600 BCE. Some of the sections of aristocracy realised the grave necessity of ending the crisis since it was hampering their prosperity also and consequently, they were forced to initiate reforms incorporating concessions to the peasants.

In 594 BCE, the Athenian aristocracy appointed Solon as an arbitrator to introduce reforms. Chosen by the citizens rather than seizing power as a tyrant, he was granted broad authority for a limited period. According to Aristotle, his major reforms included the abolition of debt slavery, the right of a third party to seek justice on behalf of an aggrieved person, and the right of appeal to a popular tribunal. Peasants' debts were cancelled and free peasants could no longer be enslaved for failing to repay loans. Solon also weakened aristocratic monopoly by dividing Athenian citizens into four income classes: *Pentakosiomedimni* (500+ *medimnoi*), *Hippeis* (300-500 *medimnoi*), *Zeugitai* (200-300 *medimnoi*), and *Thetes* (below 200 *medimnoi*). The top two classes could hold senior magistracies, the *Zeugitai* gained access to lower offices, and the *Thetes* received voting rights in the Assembly (*ecclesia*). He also created a Council (*boule*) of 400 members, revived the *ecclesia*, and curtailed the authority of the aristocratic *Areopagus*, traditionally dominated by the Eupatridae.

However, Solon's reforms did not include land redistribution, allowing the aristocracy to retain large estates. Labour shortages following the abolition of debt slavery led elites to increasingly use war captives as slaves. Dissatisfaction among the middle and lower classes continued, resulting in renewed political unrest. In this situation Peisistratus attempted to seize power in 561 BCE, but finally succeeded in 545 BCE, establishing a tyranny. Supported mainly by poor peasants and newly wealthy traders, he redistributed public wastelands previously

controlled by aristocrats, initiated building projects to generate employment, expanded maritime trade through Piraeus, and provided public credit to peasants.

After his death, his son Hippias ruled from 527-510 BCE. Following his fall, Cleisthenes introduced democratic reforms around 507 BCE. He established the *deme* as the basic administrative unit of the polis; there were 139 demes, each maintaining citizen registers and local governments headed by a *demarchos*. The boule was expanded from 400 to 500 members, with 50 representatives from each of the ten *phylai*. Cleisthenes replaced kinship-based divisions with ten residential tribes (*phylai*) and opened membership of the council to all citizens, including Thetes. Most officials were chosen by lot and were directly accountable to the *demos* through the Assembly, Council, or courts, establishing the sovereignty of the citizen body.

Under Pericles (469-427 BCE), Athenian democracy reached its height. The Assembly gained the authority to initiate legislation as well as approve or reject proposals of the boule. Most officials served one-year terms and were selected by lot, while the ten *strategoi* (generals) were elected and could be re-elected. Although powerful as military and executive leaders, the *strategoi* remained accountable to the Assembly, ensuring that ultimate authority rested with the *demos*.

Finally, during Pericles, the Athenian system of courts reached its completion. Along with supreme court to hear appeals from the decisions of magistrates, there were a large number of smaller courts formed to try all kinds of cases. At the beginning of each year a list of 6,000 citizens was chosen by lot from various sections of the country. From this list separate juries, of various sizes from 201 to 1,001, were selected to try particular cases. Each of these juries constituted a court with power to decide by majority vote every question involved in the case. Although one of the magistrates presided, but he had no special powers and the jury itself was the judge, and there was no appeal after their decisions.

12.5.1.1 Athenian Imperialism

The Persian Wars created, at Athens in particular, a temporary upsurge of *polis* patriotism above all factions and class. Between c. 500 and 480 BCE the states of the Greek peninsula fought fiercely with the Achaemenids. By about 479/8, Athens had not only a large and effective fleet, but also a superior new harbour, in Piraeus. The purpose of this League was an offensive-defensive alliance against Persia. This League was known as the 'Delian League', since it had its treasury on Delos. It was formed in about 478/7, in a breakaway movement from the general 'Hellenic League' which had fought the campaign against Xerxes. Under the guidance of Aristides, it was based on member contributions of ships or money. As the Persian danger declined, Athens gradually turned the League into an empire. It suppressed revolts, prevented withdrawals, and used League resources for its own benefit. For the next twenty-five years, the Athenian Empire dominated Greece, strengthening Athenian democracy and power under leaders like Pericles.

After establishing dominance in the Aegean, Athens sought to expand its power into the Peloponnese. This expansion worsened relations with Sparta. The two states clashed openly in the 450s BCE, but later restored an uneasy peace that lasted for nearly twenty years.

12.5.2 Government in Sparta

The development of Sparta differed greatly from other Greek city-states. Although its citizens shared the same origins as other Greeks, Sparta experienced neither tyranny nor democracy. Its transition into a city-state was unique, combining advanced and archaic features. Culturally, it stagnated after the 6th century BCE, partly due to geographical isolation-surrounded by mountains and lacking good harbours-which limited contact with the outside world. The absence of a strong middle class and the dominance of militarism also shaped Spartan society, making it the first city-state to reflect the social impact of hoplite warfare.

By the end of the 9th century BCE, Sparta had conquered Laconia in the east and Messenia in the west. These fertile regions provided access to the sea and valuable iron resources. Their populations were enslaved as state-owned *helots*, while another group, the *perioeci*, retained personal freedom and local organisation but surrendered control over military and foreign affairs. Following a Messenian revolt in the 7th century BCE, Sparta introduced major reforms attributed in legend to Lycurgus. Land was divided into equal allotments (*kleroi*) for Spartan citizens, worked by *helots* (Slaves), and the citizen body was transformed into a class of professional soldiers trained from childhood in discipline and obedience. Spartan society became highly exclusive and resistant to outside influence.

Sparta's political system was also distinctive. Monarchy continued but was limited to a hereditary military leadership shared by two royal families. The kings held little special privilege and served alongside the aristocracy in the thirty-member Council of Elders, or *Gerousia*. The remaining twenty-eight members were elected for life from citizens over sixty years of age. Top of FormBottom of FormThe nobility and monarchy were in constant conflict during the early Archaic Period which were resolved by an institutional compromise. The most powerful of all were the five magistrates or *ephors* who wielded supreme executive authority. They were elected annually from all the citizens.

Spartan situation was peculiar since the exploited outnumbered their rulers and to maintain superiority over the *Helots*, every Spartan male member had to perform the duties of a soldier and be constantly vigilant. They began training hard for this since the early age for boys and gradually developed a soldier-citizen society. Purpose of marriage was mostly just having male progeny who could go into war since Spartans had small citizen population.

The position of women in Sparta was better than their counterparts in other city-states. They were given training with the boys and kept away from domestic chores so that they could remain fit to bear healthy child. Women were allowed to engage in religious ceremonies too. The status of child as citizen was accounted for by the status of women, although they themselves were denied citizenship rights. Only the child whose father was a citizen and mother were, daughter of a citizen could get citizenship. However, women could not participate in the political processes and engage in war unless it was an emergent requirement.

Spartan discipline and their military prowess elevated Sparta into a major power, far beyond its size. Though they could never achieve complete peace in their home, in Peloponnese. Their supremacy after the Peloponnesian War did not last long due to internal crises arising continuously.

Check Your Progress (CYP)-II

A. Fill in the blanks:

- a) The main theme of *Iliad* was the war of a coalition of Greek states against the state of
- b) Sparta was located in
- c) Greek democracy was a democracy.
- d) The local governments in Athens were headed by the
- e) The old Athenian council, called, was an organ of the aristocracy.

B. Multiple Choice Questions:

1. *Iliad* and *Odyssey* by
 - (a) Homer
 - (b) Herodotus
 - (c) Plato
 - (d) Socrates
2. People's Assembly in Athens is also known as
 - (a) *Polis*
 - (b) *Ecclesia*
 - (c) *Isonomia*
 - (d) *Demokratia*
3. *Hektemoroi* in Greek were
 - (a) Aristocracy
 - (b) Slaves
 - (c) Landless Peasants
 - (d) Citizens
4. Who introduced '*Deme*' in Athens?
 - (a) Solon
 - (b) Peisistratus

- (c) Pericles
- (d) Cleisthenes

5. 'Ten Generals' or *strategoi* was established during

- (a) Pericles
- (b) Cleisthenes
- (c) Hippias
- (d) Solon

12.6 END OF THE CLASSICAL PERIOD

Two major incidents involving Corinthian sphere of influence, at Corcyra and Potidaea, then precipitated Peloponnesian war which lasted with interruption from 431 to 404 BCE. Athens was defeated totally by Sparta and their navy was destroyed. The final takeover came with the invasion of the Macedonian King, Phillip II with his son Alexander. The conflicts among the Greek states provided Persians an opportunity to interfere in their affairs again and thus, become politically dominant.

The population of Sparta steadily declined because it resisted recruiting new citizens even when manpower was needed. Instead, it armed freed helots, social outcasts, and mercenaries. Continuous warfare and harsh leadership weakened its social and political systems. Spartan leaders lacked vision and flexibility, and conflicts frequently arose among kings, commanders, and the ephors. The property system also deteriorated as many Spartans lost their land allotments, which meant losing their status as full Spartiates. Sparta's power finally collapsed after its defeat by Thebes in 371 BCE. Although it continued to participate in Greek politics, it was only a shadow of its former glory. By the time Philip II of Macedon rose to power, Sparta had become a minor state rather than a major force.

12.7 LET US SUM UP

The Greek civilisation was unique for being the earliest democracy when Ancient World empires were having monarchy as political structure. Ancient Greek history spread over for nearly 2000 years with Bronze Age civilisations-Minoan and Mycenaean, extending into Dark Age, Archaic Period and the Classical Age. The socio-political, economic and cultural growth happened rapidly during the Archaic phase leading to the emergence of democracy in Classical Age. Athens and other *Polis* with exception to Sparta transitioned into democracy passing through various political phases of Monarchy, Oligarchy and Tyranny. Later Athens formed Delian League and expanded its authority on other *Poleis* becoming an imperialist City-State. Sparta on the other hand remained an oligarchy politically with compulsory military enrollment for all male citizen on the pretext of enslaving the entire population of Messenia and Laconia City-States on the Peloponnesian region. Most of the Greek City-States, however declined by the 3rd century BCE and were finally defeated by the Macedonian ruler, King Phillip II.

12.8 GLOSSARY

Phonetic Principle: The symbols in this script stood for different sounds, i.e. it was an alphabetic script.

Polis (Poleis-Plural): A Self-governing State

Hoplōn: Metal Shields

Hektemoroi: Landless Peasants

Metics: Foreigners in Athens

Kleroi: Land Allotments

Perioeci: Non-citizens of Sparta

12.9 EXAMINATION ORIENTED QUESTIONS

Short Answer Questions:

- Q1. Elucidate on the economic pattern of the Minoan Civilisation.
- Q2. What do you understand by the term *Polis*?
- Q3. Discuss the function of *Gerousia* in Sparta.
- Q4. Who were *Helots*?
- Q5. Highlight the reforms of Solon in Athens.

Long Answer Questions:

- Q1. Compare the nature and form of state structure in Athens and Sparta.
- Q2. Discuss the growth of political institutions in Ancient Athens and Sparta.
- Q3. Elaborate on the main stages and features of Athenian democracy.
- Q4. Analyse the factors responsible for Sparta being Oligarchy as its political structure.
- Q5. Discuss the growth of Athenian democracy highlighting the role played by the 'tyrants.'

12.10 LESSON END EXERCISES

- Q1. Discuss social life of the people in Mycenaean Civilisation.
- Q2. Throw light on the economic structure of the Minoans.
- Q3. Trace the role of Cleisthenes in establishing Classical democracy in Athens.
- Q4. Explain 'Delian League'.
- Q5. Evaluate the reasons for the decline of Athens and Sparta.

12.11 ANSWER KEY

CYP-I

A. 1. (b) 2. (a) 3. (b) 4. (c) 5. (a)

CYP-II

A. Fill in the blanks:

- a) Troy
- b) Peloponnesia
- c) Direct
- d) *Demarchos*
- (e) *Areopagus*

B. Multiple Choice Questions:

1. (a) 2. (b) 3. (c) 4. (d) 5. (a)

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STATE AND EMPIRE

SEMESTER-I

COURSE NO. HIST104

UNIT-III

LESSON 13

THE ROMAN EMPIRE

STRUCTURE

13.0 Learning Objectives and Outcomes

13.1 Introduction

13.2 Roman Republic: Establishment and Expansion

13.2.1 Early Romans

13.2.2 First Phase

13.2.3 Second Phase

13.3 Political Structure in the Republic

13.4 Conflict of the Orders

13.4.1 First Phase of the Political and Social Struggle

13.4.2 The Social Struggles in the Late Republic

13.4.3 Conflicts and Expansion in the Late Republic

13.4.3.1 Professional Army and War Lords

13.4.3.2 Wars for Expansion

13.5 Decline of Western Roman Empire

13.6 Let us sum up

13.7 Glossary

13.8 Examination Oriented Questions

13.9 Lesson End Exercises

13.10 Answer Key

13.11 Suggested Readings

13.0 LEARNING OBJECTIVES AND OUTCOMES

Learning Objectives

The objective of this lesson is to enable you to:

- Understand developments in the Roman political structure.
- Learn about the Class Struggle in the Roman society.
- Explain various terms such as Orders, Senate, Council, Assembly etc.
- Trace the reasons for Decline of the Roman empire.

Learning Outcomes

After going through this lesson, you will have clear understanding of:

- The terms such as Republic, Patrician, Plebeian etc.
- Roman policy of expansion and consolidation under Senate.
- Social conflicts and various reforms.
- The Socio-Political and economic reasons for decline.

13.1 INTRODUCTION

Dear Learners,

As the glory of Greek civilization declined, a new civilization influenced by Greek culture emerged in Italy on the banks of the Tiber. During the time when Alexander was conquering the world in the 3rd century BCE, Rome had already become a dominant power in the Italian Peninsula.

Over the next five centuries, Rome expanded across the Mediterranean towards the East. By the end of the 1st century BCE, it controlled the entire Hellenistic world and much of western Europe. It also destroyed the North African power of Carthage, turning the Mediterranean into a “Roman Lake.” Through this expansion, Rome spread Greek institutions and ideas across the western Mediterranean, while its expansion into the Rhine and Danube, introduced Mediterranean urban culture to regions still in the Iron Age. Thus, Rome built a significant historical bridge between East and West.

13.2 ROMAN REPUBLIC: ESTABLISHMENT AND EXPANSION

Rome was situated in almost the centre of the Italian Peninsula surrounded by the Adriatic Sea to East, Tyrrhenian Sea extending into the Mediterranean Sea to the West and the Ionian Sea to the South. Towards North was the Alps. The extensive coastline of the Peninsula was broken by few good harbours. Though Italy was highly

deficient in mineral resources, it did contain some excellent marble and small quantities of tin, copper, iron and gold. However, it was rich in fertile land and hence the Romans predominantly remained an agrarian economy to the greater part of their history. They were not into extensive trading despite being a Peninsular country but on the contrary were more open to invasion than Greece. Towards the North too Romans were always exposed to invasion by the tribes from central Europe as the Alps could not form an effective barrier. Thus, we see Rome was always exposed to invasions from all directions. This probably became the pretext for the Romans to be absorbed in military pursuits ever since they settled on the Italian Peninsula and dominated the regions by force.

13.2.1 Early Romans

Rome was founded by the Italic peoples. The city was strategically located with settlements on seven hills along the river Tiber. It was fortified in 753 BCE which marked the beginning of the city and many historians count this date as marking the chronological beginning of Roman events. However, the archaeological records indicate, the city being fortified first in about 550 BCE. It was around this time that population of Rome began to rise and people moved out to claim nearby regions of the foothills. By the virtue of its strategic location, Rome very soon began to control other important cities of the surrounding. They were expanding rapidly when in the early 6th century BCE, Etruscans captured Rome. Monarchy was established as the form of government.

From about 1000 BCE, the beginning of the Iron Age brought major changes to Italy, and by 800 BCE iron was widely used. Improved agricultural production led to rapid urbanisation in north-western and central Italy, where the Etruscans lived. They were non-Indo-European tribes and became the most advanced people of pre-Roman Italy. The Etruscans built a powerful civilisation in central Italy and by the sixth century BCE, important cities such as Veii, Tarquinii, Vulci, Caere, and Vetulonia had emerged. Skilled in metalwork, trade, and craftsmanship, they left a strong cultural legacy. Their religious practices, architectural knowledge (such as the arch and vault), and social customs deeply influenced the Latins. Rome was one such Latin town shaped by Etruscan influence.

The monarchy was overthrown in 510 BCE and replaced by a Republic. A legend accounts for a revolution against the crimes of the last Etruscan king, Tarquin the Proud (*Tarquinius Superbus*). After much suffering the native Romans revolted since all these while they thought Etruscans as foreigners. The movement was successful and immediately the Roman senatorial aristocracy took the full power. With this revolt the rule of the Etruscans declined.

13.2.2 First Phase

Rome began to expand soon after the establishment of the Republic. They expanded in two distinct phases, the first spreading from about 500 to 280 BCE and the second was from about 264 to 146 BCE.

The expansion in first phase covered primarily the central Italy, mostly in Latium. During this phase they brought the entire Italian Peninsula under their control. The Romans aligned with all the Latin speaking groups which led them to accumulate huge resources to be used in resisting invasions by the Etruscans, the Volci, the Sabines and the Aequi. This struggle with non-Latin states took an important turn in c. 396 BCE when Rome captured the

Etruscan capital city, Veii almost after ten years. After this Romans went through a serious setback when the Celts in 390 BCE invaded and destroyed Rome. The Celts looted huge amount of booty and withdrew. But during this invasion since Rome was destroyed it had to be rebuilt. A new defensive wall was built. By mid-4th century BCE Rome recovered and began with their expansionist policy with more aggression. They began by tightening their grip over the Latin states who in turn resisted, but the Romans went into series of campaigns. By 338 BCE, the Latin states were brought under Roman control. Next region in line was the fertile plains of Campania. The wars were fiercely fought with the neighbouring states. Rome was in constant war with the Samnites till 295 BCE and by then most of the central Italy was captured. Also, by 295 BCE most of the Etruscan territories were brought under their control. After bringing the entire central Italy under their rule, the Romans turned their attention towards southern Italy.

Southern Italy was a stronghold of the Greeks. Greek city states resisted Roman expansion in their area. Tarentum, one of the Greek city states broke into conflict with Rome in 282 BCE. Initially his troops were successful but finally Romans defeated him in 275 BCE and took over southern Italy. With this victory the first major phase of the Roman expansion ended and the entire Italian Peninsula came under Roman suzerainty.

13.2.3 Second Phase

After conquering southern Italy, Rome came into contact with Sicily in the western Mediterranean Sea. The region was dominated by Carthage, originally a Phoenician settlement that developed into a powerful trading empire controlling southern Spain, Corsica, Sardinia, Sicily, and parts of North Africa. Located on the North African coast, Carthage served as a major commercial centre linking Phoenician trade networks with northwest Africa and Spain.

After consolidating its power in southern Italy, Rome attempted to annex Sicily, leading to a prolonged conflict with Carthage. Since Roman expansion in the western Mediterranean could occur only at Carthage's expense, the two powers fought a series of wars known as the Punic Wars- First (264-241 BCE), Second (218-201 BCE), and Third (149-146 BCE). Although these wars strained Roman resources, they ended with the complete destruction of Carthage and the creation of Roman provinces in Sicily, Spain, and Africa.

At the same time, revolts occurred in the Macedonian republics and in Greece. Rome suppressed these uprisings, annexed Macedonia in 147 BCE, and destroyed Corinth in 146 BCE, the same year Carthage was destroyed. Macedonia became a Roman province, the Greek states were placed under indirect Roman rule, and Egypt was later brought under Roman protection.

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13.3 POLITICAL STRUCTURE IN THE REPUBLIC

In Ancient Rome, the early political system consisted of the king, the Senate, and the Assembly, though the Senate held greater authority and often clashed with the kings. In 510 BCE, the monarchy was abolished and replaced by the Republic, which lasted until 27 BCE. During this period, political power was mainly controlled by the aristocracy, with the Senate acting as a dominant oligarchic council limited to aristocratic members. Roman political institutions were closely linked with social structure and were strongly shaped by traditional customs.

13.3.1 The Senate

In Ancient Rome, constitutional decisions were guided by the ancestral traditions known as *Mos Maiorum*. Under the Republic, the Senate functioned as an oligarchic council dominated by the aristocracy. Its early members were likely those who gained authority after the monarchy ended. Senate membership was obtained through co-optation, where existing senators selected new members, and it was restricted to patrician males who served for life. The Senate exercised wide but informally defined powers. Senators were distinguished by the purple-bordered garment called *Laticlavia* and were required to remain available for sessions; they could not leave Italy without the Senate's permission.

13.3.2 The Republic and its Officials

In Ancient Rome, inscriptions known as *Fasti* recorded the annual list of Consuls, the highest officials of the Republic. Two Consuls served simultaneously as chief magistrates with extensive executive, judicial, and military powers. They were elected annually by a citizen assembly, including plebeians, rather than by the Senate, and could be re-elected. By custom, a Consul automatically became a senator. Their authority included *Imperium* (power to command) and *Auspicium* (power to consult the gods). Each Consul could veto the other to prevent excessive power. They commanded legions, acted as judges, convened the *Comitia Centuriata*, proposed laws, and conducted elections for other offices.

Besides Consuls, the Republic had other elected magistrates. Two Censors were elected every five years by the *comitia centuriata* for an 18-month term. They conducted the census to classify male citizens by wealth for military service, voting, taxation, and eligibility for offices, and also supervised public morality according to Roman values. Other junior magistrates included Aediles and Quaestors, who managed various administrative functions of the state.

13.3.3 The Roman Assemblies

In Ancient Rome, the political system also included 'Tribal Assemblies', which existed since the time of the monarchy. All adult male members of the tribes that originally inhabited Rome were part of this assembly.

Comitia Curiata

In Ancient Rome, the assembly of all citizens was known as the *Comitia Curiata*. After the patricians gained power and the Republic was established, this assembly gradually lost its real authority, though it continued to exist formally. It was organised into kinship-based units called *Curiae*, into which the early inhabitants of Rome were divided.

Patricians dominated its proceedings by selecting the presiding officer. Voting was conducted collectively by each *curia* rather than by individual members, meaning the opinion of the entire curia counted as a single vote. Through kinship ties, patricians influenced these decisions and spoke on behalf of the curia, reducing other citizens to mere spectators. Consequently, the plebeians pressured the Senate to reorganise the citizens and establish another assembly.

Comitia Centuriata

After the struggle of the plebeians in Ancient Rome, a new assembly called the *Comitia Centuriata* was formed. Like the *Comitia Curiata*, it included all Roman citizens, patricians and plebeians, but differed in how citizens were organised. In this assembly, citizens were grouped into 193 centuries, divided into five classes based on property qualifications.

Most centuries were assigned to the first three classes, which consisted of the aristocracy and wealthy landowners, while the poorest citizens, the *Proletarii*, were placed in the lowest class. Since voting was conducted by centuries rather than by individual votes, the aristocracy and large landowners held greater influence despite being fewer in number. The procedures and functioning of the assembly were also tightly controlled by the patricians.

Concilium Plebis

The *Concilium Plebis* was an assembly composed exclusively of the plebeian class in Ancient Rome. It dealt with issues concerning the plebeians and gradually became an established institution with regular procedures and its own elected officials. The Tribunes were elected annually by this assembly, and over time the position became attractive to wealthy plebeians. The office gave plebeians limited access to political power, which had been largely unavailable to them in the early Republic.

Check Your Progress (CYP)-I

A. On the basis of your understanding of the previous sections, answer the following questions in your own words:

Q1. Trace the struggle between Early Romans and the Etruscans.

Q2. Discuss the first phase of Roman expansion during the Republic.

Q3. The Senate.

True or False:

- a) Etruscans were an Indo-European tribe settled in central Italy.
- b) Plebeian class included poor peasants and farmers.
- c) The archaeological records indicates that Rome was fortified first in about 550 BCE.
- d) Punic Wars were fought between the Romans and the Greeks.
- e) *Concilium plebis* was an assembly consisting of only the plebeian class.

13.4 CONFLICT OF THE ORDERS

In Rome, the Senate dominated society and politics and was controlled by the patrician aristocracy. Although plebeians formed a large part of the army, they had no political rights. Their long struggle for representation in government during the Republican period is known as the Conflict of the Orders. A key milestone was the recognition of the Tribunes in 494 BCE.

13.4.1 First Phase of the Political and Social Struggle

One major demand of the plebeians in Rome was a written legal code to prevent arbitrary judicial authority. When they threatened to boycott military service, the Senate appointed a ten-member commission, the *Decemvirs* under Appius Claudius. Around 450 BCE, they produced the Code of the Twelve Tables, the first written Roman law, introduced alongside the *Comitia Centuriata*.

Another milestone came in 367 BCE when one consulship was opened to plebeians, breaking patrician monopoly over the Senate. This enabled some plebeian families to rise to prominence, including Tiberius Gracchus, Gaius Gracchus, and Mark Antony. In 326 BCE, the harsh debt system known as *Nexum* was abolished, which had earlier allowed debtors to fall into bondage.

The most important political victory came in 287 BCE when plebeian tribunes gained full authority through the *Lex Hortensia*, enacted by Quintus Hortensius. This law made decisions of the *Concilium Plebis* binding on the entire Roman state, marking a major phase in the end of the Conflict of the Orders.

13.4.2 The Social Struggles in the Late Republic

At the beginning of the Republic in Rome, most plebeians were small peasants. By the end of the Republic,

however, the plebeian order had become socially divided. A small elite group gained wealth and political power, and some plebeian families entered the Senate and joined the ruling oligarchy, becoming similar to the patrician aristocracy. As a result, the plebeian elite gradually lost interest in the problems of the peasantry.

While many plebeians initially owned land, by the 3rd century BCE many lost their holdings and became landless, forming the *Proletarii*. Between the elite and the landless stood the small peasants known as the *Assidui*, who formed the backbone of the Roman infantry but struggled to retain their land.

The first major attempt at land reform was led by the Tiberius Gracchus and Gaius Gracchus. In 133 BCE, Tiberius, as Tribune, proposed limiting the occupation of public land (*Ager Publicus*) to 640 acres and redistributing the excess to peasants. A commission was formed to recover illegally occupied land, but the aristocracy resisted and Tiberius and about 300 supporters were killed. Later, in 123 BCE, Gaius Gracchus attempted similar reforms, but conflict with the Senate led to his death in 121 BCE and the massacre of his followers. By 119 BCE, the commission for redistributing *ager publicus* was dissolved, ending the major land reform movement in the Roman Republic.

13.4.3 Conflicts and Expansion in the Late Republic

Rome began to face a major crisis in the recruitment of soldiers since the size of the *assidui* class had dwindled over the time and this problem needed immediate solution. It was not possible for the landless peasants to render military service out of their own resources. Earlier, a partial solution to this problem had been found by raising auxiliary contingents from subjugated territories. The state also was maintaining a part of the cavalry at its expense. But in the last hundred years of the Republic, it experienced some unique changes. In Ancient Rome, a major change was the creation of a professional army under individual commanders. Earlier, the *assidui* soldiers or the property-owning citizens, returned to their farms after wars. With the new system, soldiers served for long periods in campaigns and were often stationed outside Italy. Over time, these armies developed a strong identity, and soldiers became highly loyal to their commanders who led them to victory. As the power of these commanders increased, they frequently came into conflict with one another and with the Senate for control of the Republic.

13.4.3.1 Professional Army and Wars for Expansion

Between 100 and 27 BCE, several powerful commanders—Gaius Marius, Lucius Cornelius Sulla, Marcus Licinius Crassus, Pompey, Julius Caesar, Mark Antony, and Augustus—rose to prominence and reshaped the course of Roman history. During this period, the army increasingly became a decisive factor in Roman politics, often used in the personal struggles of the aristocracy. From about 100 BCE, Rome experienced decades of violent upheavals as it expanded by subjugating Hellenistic kingdoms and territories in West Asia.

The struggle for control of powerful armies led to civil wars. Sulla gained supremacy and became dictator in 82 BCE, though he retired in 79 BCE. Later, four major warlords—Lucullus, Crassus, Pompey, and Julius Caesar—dominated Roman politics. After Lucullus retired, the remaining three formed the ‘First Triumvirate’. Crassus was killed at the Battle of Carrhae, leaving Pompey and Caesar in rivalry. Caesar eventually defeated Pompey after crossing the Rubicon and became dictator in 48 BCE.

Caesar's growing authority alarmed the Senate, and he was assassinated in 44 BCE by Marcus Junius Brutus and Gaius Cassius Longinus. His supporters-Mark Antony, Lepidus, and Augustus (Octavian)-formed the 'Second Triumvirate' in 43 BCE and defeated Brutus and Cassius in 42 BCE. Later, rivalry developed between Antony and Octavian. Antony allied with Cleopatra, the queen of Egypt, but their forces were defeated by Octavian at the Battle of Actium. After the deaths of Antony and Cleopatra in 30 BCE, Octavian became the sole ruler. In 27 BCE he assumed the title Augustus and the position of Princeps, marking the end of the Roman Republic and the beginning of the Roman Principate.

Top of Form
Bottom of Form

Check Your Progress (CYP)-II

Fill in the blanks:

- a) The social conflict between the patricians and plebeians ensued throughout the Republican period was known as
- b) A ten-member commission called which was presided by Appius Claudius.
- c) Quintus Hortensius was elected dictator with specific objective to resolve the crisis and he formulated a law
- d) The Roman small peasants were known as the
- e) This coalition of, and Julius Caesar was referred to as the 'First Triumvirate'.

13.5 DECLINE OF WESTERN ROMAN EMPIRE

The decline of the Roman Empire has been one of the most widely debated topics in history. As the saying goes, "Rome was not built in a day, nor was it lost in one." Scholars have proposed many explanations for its decline. Although strong rule was restored in 284 CE under Diocletian, the Western Empire survived for only about two more centuries, while the Eastern Empire continued for nearly a millennium. However, the restored state differed greatly from the earlier Roman system. Historians attribute the decline to a combination of internal crises, political, economic, and social, and external pressures from attacks along the imperial frontiers.

13.5.1 Internal Factors

13.5.1.1 Political Crisis

Under Augustus and later rulers of the Principate, peace was established in the Roman Empire. However, the system had a major flaw: there was no clear law of succession. When an emperor died suddenly, uncertainty over the successor often led to civil wars. This instability became particularly severe between 235 and 284 CE. The absence of constitutional methods for reform further intensified conflicts, and many unpopular regimes after 180 CE were overthrown through violence, which in turn generated more instability.

Another factor leading to the decline of the Roman empire was the rise of strong feelings of regionalism or provincialism. With the establishment of new provinces, they gradually became the new power centres which was distinctly visible after the 3rd century CE when most of the Emperors were the inhabitants of the regions outside Italy. Feeling among the inhabitants of provinces arose that their best interest could be served only if Emperor was from their region or province. This sentiment sowed the seeds of rebellion among the inhabitants for the Emperors not from their region. This became kind of dangerous trend for violent uprisings and race to place their own ruler on the throne. As a result, the situation gave rise to sectionalism affecting the unity of the Empire and violent provincial competition for the throne, leading the Empire into series of civil wars.

13.5.1.2 Economic Causes

The economic decline of the Roman Empire was closely linked to political decisions and structural weaknesses. One major problem was the slave-based economy. During the early Principate, the supply of slaves began to decline, especially after the reign of Trajan. Earlier, slaves were obtained through large-scale wars and raids, but as military expansion slowed and frontier pressures increased in the 2nd century CE, the supply of slaves decreased and their prices rose. At the same time, major plagues in 165 CE and 250 CE reduced the population, creating serious labour shortages.

Another factor was the shift to a defensive policy after Marcus Aurelius, as pressure from Germanic tribes increased. The army expanded from about 250,000 troops after the death of Augustus to nearly 650,000 by the 4th century CE, making defence extremely expensive. To support the army and state welfare, such as free grain and subsidized oil and wine, the government imposed heavy taxation.

To address financial shortages, the state debased its coinage by reducing weight and mixing precious metals with base metals, which eventually weakened the economy. Long-distance trade declined, leading to the deterioration of cities and towns. As the political importance of Rome decreased, economic activity also declined, and by the 3rd century CE many aristocrats moved from the capital to rural estates in Italy, Gaul, and Spain.

13.5.1.3 Social Crisis

From the 2nd century CE onward in the Roman Empire, landowners increasingly reduced the status of free tenant farmers known as *Coloni* (singular: *Colonus*). Although technically free, these cultivators became dependent on landlords and gradually lost their freedom of movement, becoming tied to the land they worked. By the 4th century CE, this system, known as the colonate, became widespread in the western empire. It represented a transitional stage between classical Greco-Roman slavery and medieval European feudalism.

13.5.2 External Factors

The increasing number of invasions by the Germanic barbarians on the frontiers of the Western Roman Empire accentuated the pace of decline. With time the tribes along the borders moved towards greater social differentiation and higher levels of political and military organization. Also, many Germanic warriors were made part of the Roman imperial armies with passing times, thus creating a certain inter-mix of the Roman and Germanic elements within the imperial State apparatus itself. The danger from the Germanic borderlands grew as the Roman civilization

gradually altered them. Therefore, from the time of Marcus Aurelius onwards the successive increase in the barbarian pressure on the Empire were not just some random strokes of ill-fortune for Rome, but were to a large extent structural consequence of its own existence and success. (Anderson, 1974).

From the middle of the 4th century CE, the tribal attacks became more organised and frequent. The tribes were now not satisfied only with plunder and raids but looked for land acquisitions. Finally in a fierce battle-the Battle of Hadrianopolis -in 378 CE between the Visigoths and the Roman army, the latter was defeated and this opened the way for further tribal invasions. Also, this battle led to a permanent division of the Roman Empire into the Western and the Eastern Empire.

These invasions, however did not completely overthrow the Roman institutions, and they continued and evolved intermixed with the Germanic political, social, and economic patterns, until 7th century CE when a new system known as Feudalism emerged.

13.6 LET US SUM UP

The Roman Empire formed one of the most formidable Empires in the world. It acted as a bridge between Ancient and Medieval traditions. The Crisis of the Roman Empire marked the final phase of Greco-Roman antiquity and was a period of deep political, economic, and social upheaval. Rome expanded extensively between 510 BCE and 27 BCE including Africa, Spain, Gaul, Egypt etc. Roman Empire reeled under Social Struggle from beginning of the Republic. Various reforms were introduced by the Senate but powers remained dominantly in the hands of rich aristocracy. In the last 100 years Rome witnessed rise of professional army with powerful commanders who changed the political course of the Republic and led to an establishment Empire from 27 BCE onwards. However, after 3rd century Roman Empire began to decline due to various socio-political and economic reasons. Particularly, continuous pressure from the Germanic tribes, led to the fall of the Western Empire.

13.7 GLOSSARY

Protectorate: It meant that the foreign policy was under the Romans.

Laticlavia: A dress with wide purple-coloured border worn by the Senators.

Legions: A unit of Roman Field Army

Proletarii: Property less Class

Coloni: Tenant Farmers

Hoplites: Heavily armed foot-soldiers

Ager Publicus: Agricultural land captured during expansion owned by the State.

13.8 EXAMINATION ORIENTED QUESTIONS

Short Questions

- Q1. Discuss the second phase of Roman expansion during the Early Republican period.
- Q2. Highlight the role of Gracchun Brothers in Roman Republic.
- Q3. Define *Comitia curiata*?
- Q4. What were the Political reasons of decline of the Roman Empire?
- Q5. Germanic Tribes caused the final decline of Western Roman Empire. Elaborate.

Long Questions

- Q1. Discuss the expansion of Rome during early Republic (c. 510- 146 BCE).
- Q2. What do you understand by 'Conflict of the Orders'? Discuss in details.
- Q3. Trace the various political structures and its role in the Roman Republic.
- Q4. Explain the phases of social struggle in the Roman Empire.
- Q5. Evaluate the reasons of Decline of the Roman Empire.

13.9 LESSON END EXERCISES

- Q1. Discuss the phases of Roman expansion between c. 510 BCE and 27 BCE.
- Q2. Evaluate the importance of the Punic Wars in the Roman expansion.
- Q3. Highlight the significant changes in the political structure followed by 'Conflict of the Orders'.
- Q4. Trace the emergence of professional army and rise of the Warlords in Roman polity.
- Q5. Discuss the socio-political and economic reasons for the Decline of Roman Empire.

13.10 ANSWER KEY

CYP-I

- Q1. See sub-section 13.2.1
- Q2. See sub-section 13.2.2
- Q3. See sub-section 13.3.1

A. True or False:

- a) False
- b) True

- c) True
- d) False
- e) True

CYP-II

Fill in the blanks:

- a) 'Conflict of the Orders'
- b) 'Decemvirs'
- c) *Lex Hortensia*
- d) *Assidui*
- e) Crassus, Pompey

13.11 SUGGESTED READINGS

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STATE AND EMPIRE

SEMESTER-I

COURSE NO. HIST104

UNIT-III

LESSON 14

ART AND CULTURE

STRUCTURE

14.0 Learning Objectives and Outcomes

14.1 Introduction

14.2 Greek Art and Culture

14.2.1 Literature

14.2.1.1 *Poetry*

14.2.1.2 *Drama and Tragedy*

14.2.1.3 *Comedy*

14.2.1.4 *Prose*

14.2.1.5 *Philosophy*

14.2.2 Art and Architecture

14.2.2.1 *Art*

14.2.2.2 *Architecture*

14.2.2.3 *Sculptures*

14.3 Art and Culture in Ancient Rome

14.3.1 Culture in Early Rome and the Republic

14.3.2 Culture Under the Principate

14.3.3 Roman Culture During the Third Century Crisis and After

14.4 Let us sum up

14.5 Glossary

14.6 Examination Oriented Questions

14.7 Lesson End Exercises

14.8 Answer Key

14.9 Suggested Readings

14.0 LEARNING OBJECTIVES AND OUTCOMES

Learning Objectives

The objective of this lesson is to enable you to:

- Understand the Greco-Roman style of art and culture.
- Explain relations between Greek cultural traditions and society.
- Appreciate the contribution of Greco-Roman cultural traditions in the Modern world.
- Trace the rich literary traditions of Greco-Roman Empire.

Learning Outcomes

After going through this lesson, you will have clear understanding of:

- The art, architecture and literature of Greco-Roman Empire.
- Socio-cultural context behind Greco-Roman art and architecture.
- Literary traditions such as myths, legends, satire etc. of Ancient Greece and Rome.
- Cultural impact on modern world.

14.1 INTRODUCTION

Dear learners, the cultural achievement of the Greeks in various fields have long been recognised by world. Greek philosophy specially originated in a more inclusive manner than it had ever happened earlier. They attempted to find out answers to every conceivable question about nature of the universe, the problems of truth, and the meaning and purpose of life. In cities like Athens, writing, reading and arithmetic was a common attainment among the free population. But education was not the state's responsibility and only a private affair. Apprenticeship through state was provided only for military and the gymnasium, and until the mid-5th Century BCE, formal teaching stopped at the elementary level. Vocational training could be acquired in the home or through apprenticeship. Professional coaching was provided only in horsemanship, athletics and wrestling. In literature or philosophy, people acquired knowledge informally from their elders and contemporaries, or by their own efforts.

14.2 GREEK ART AND CULTURE

14.2.1 Literature

The learning process got revolutionised with the men called ‘Sophists’, in about mid-5th Century BCE. Sophists were an intellectual group inspired by democratic principles of freedom and individualism. They travelled to main centres offering, for large fees, education in rhetoric, philosophy and statecraft. Advanced education grew with them but still remaining a private and expensive activity, usually on the basis of a master-disciple relationship. One of the leading Sophists was Protagoras, did most of his teachings in Athens. He famously said, ‘Man is the measure of all things’. (Ralph and Burns, 1986). This dictum contained the essence of the Sophist philosophy. Sophists believed that there were no absolute truths or eternal standards of right and justice and that truth, goodness, justice and beauty are all relative to human needs. This idea of individualism was later twisted by Thrasymachus, who propagated that all law and customs were merely expressions of the will of the strongest and shrewdest for their own advantage, and therefore a wise man was a ‘perfectly unjust man’. Important fact was that sophists condemned slavery and the racial exclusiveness of the Greeks. they championed liberty, the rights of common man, and the practical and progressive point of view. They also condemned war and ridiculed the chauvinism of many Athenian citizens. Perhaps most importantly, they broadened philosophy to include physics and metaphysics besides, ethics and politics. As Cicero from Rome expressed it that, the Sophists brought philosophy down from heaven to the dwellings of men. But for conservatives the sophists principles were those leading to atheism and anarchy, since everything was relative to the whims of the individual.

Another development of the time was in book writing. Books consisted of sheets made from thin strips of an Egyptian reed called papyrus, pasted together side by side to form a roll-on which texts was written in a series of columns. The reader of papyrus roll received very little help since there was no punctuation marks, headings and paragraphs were erratic even in literary texts, individual words mostly, were not even separated. Each copy had to be written out by hands to make multiple copies. Bookstalls did develop by the late 5th Century BCE, but that was for very modest trade, with circulation mainly on a personal, non-commercial basis. Thus, written words were of less importance in Greek society as they preferred to talk and listen, even their architecture suggested this.

14.2.1.1 Poetry

By the end of the Dark Age, urban life was steadily increasing in complexity. The new habits and interests were reflected in new forms of literature, especially of a more personal type. The first to be developed was the elegy, which was probably intended to be delivered rather than sung to the accompaniment of music. The theme of elegy varied from individual reactions toward love to the idealism of patriots and reformers. Outstanding among the authors of elegiac verse was Solon the legislator. In the 6th Century and early part of the 5th Century BCE, the elegy was gradually displaced by the lyric, which derived its name from the fact that it was sung to the music of the lyre. This new type of poetry was particularly well adapted to the expression of passionate feelings, the violent loves and hates engendered by the strife of classes. Empedocles of Acragas and Parmenides of Elea were important pre-Socratic philosophers, who wrote only in poetic form. Alcaeus and Sappho, the latter a woman

poet from the island of Lesbos, used it to describe the poignant beauty of love, beautiful springs and starlit splendour of a summer night. However, during the Classical Period the nature of poetry developed to the choral lyric, intended to express the feelings of the community rather than of any one individual. Simonides of Ceos, Bacchylides and greatest of them all, the Boeotian poet Pindar, were the most prolific writers. Pindar lived from 518 to about 438 BCE. His lyrics took the form of odes celebrating the victories of athletes and the glories of Greek civilization.

14.2.1.2 Drama and Tragedy

The supreme literary achievement of the Greeks was the tragic drama. Like many of their great works it was also based on religion. Mostly they were dedicated to the worship of Dionysus, the god of spring and of wine, a chorus of men dressed as satyrs, or goat-men, sang and danced around an altar. They enacted the various parts of a dithyramb or choral lyric that related the story of the god's career. With passing time, a leader came to be separated from the chorus to recite the main parts of the story. The real drama was born about the beginning of the 5th Century BCE when Aeschylus introduced a second 'actor' and relegated the chorus to the background. The name 'tragedy' applied to this drama originated from the Greek word *tragos* meaning 'goat'. Aeschylus (c. 525-456 BCE) wrote nearly 80 plays, of which seven have survived in complete form. Best among them are *Prometheus Bound* and a trilogy known as *The Oresteia*. The recurrent theme of all these plays were guilt and punishment. Sophocles (c. 496-406 BCE) was the greatest tragedians. His style was more polished and his philosophy more profound. He supported peace and harmony, intelligent respect for democracy, and profound sympathy for human weakness. The most famous of his plays were *Oedipus Rex* and *Antigone*. The last great tragedian was Euripides (c. 480-406 BCE) who wrote *Alcestis*, *Medea* and *The Trojan Women*. He was the first to give the ordinary man, even the beggar and the peasant, a place in the drama.

Tragedy was not ritual drama. Most of the tragedies made their first appearance at the Greater or City Dionysia, held in Athens in the early spring, the most magnificent of the four annual Athenian festivals honouring Dionysus. Greek tragedies presented little action on the stage; the main business of the actors was to recite the incidents of the plot which was already familiar to the audience, for the story was drawn from popular legends. Secondly, Greek tragedy devoted little attention to the study of complicated individual personality. There was no development of individual characters. They presented characters on stage wearing masks to disguise any characteristics which might serve to distinguish them too sharply from the rest of humanity. Finally, the purpose of Greek tragedies was to purify the emotions of the audience by representing the triumph of justice, besides the depiction of suffering and interpreting human actions.

14.2.1.3 Comedy

Greek comedy like the tragedy had outgrown the Dionysiac festivals but it attained full development only by late 5th Century BCE. Aristophanes (born in about 450 BCE), who lived in Athens was the greatest representative of Greek comedy. Most of his plays satirized the political and intellectual ideals of the radical democracy of his time. In *The Knights* he criticized the incompetent and greedy politicians for their reckless adventures in imperialism. In *The Frogs* he mocked Euripides's innovations in the drama. He also ridiculed Sophists and Socrates along, in

The Clouds. Though he was an imaginative and humorous writer, he was prejudiced about various things. He must be credited for his sharp criticisms of the policies of the war-hawks of Athens during the struggle with Sparta. Other important comedy writers were Cratinus and Eupolis.

14.2.1.4 Prose

The Greek literature would be incomplete without the mentioning of the two great historians of the Classical Period-Herodotus, the 'Father of History', and Thucydides. Herodotus was a native of Halicarnassus in Asia Minor, lived between about 484 to 420 BCE. He travelled extensively through the Persian empire, Egypt, Greece, and Italy, collecting a vast amount of interesting information about various peoples. He famously wrote about the great War between the Greeks and the Persians with so much of background that the work seemed to be almost a history of the world. For Herodotus the War was an epic struggle between East and West, with Zeus giving victory to the Greeks against a mighty host of barbarians.

Thucydides was a younger contemporary of Herodotus, lived sometime about 460 to 400 BCE. He deserved to be considered the founder of scientific history. He was influenced by the scepticism and practicality of the Sophists, and chose to work on the basis of carefully chosen evidence, rejecting legends and hearsay. He wrote the history of the Peloponnesian War, in which he was himself a participant in the early stages, and he devoted his life to his *History*. His aim was to present an accurate record which could be studied with profit by statesmen and generals of all time.

14.2.1.5 Philosophy

The Greek philosophy had its origins in the 6th Century BCE in the work of the 'Milesian School', whose members were natives of the commercial city of Miletus. Their philosophy was fundamentally scientific and materialistic. They believed that all things could be reduced to some primary substance which the source of worlds, stars, plants, animals, and humans, and to which all would ultimately return. The notion that the earth floats on water was familiar in several Near-Eastern myth, and Thales, the founder of the Milesian school, took it from there. He was the first of the 'physicists' - *physis* is the Greek word for 'nature'. Anaximander insisted that it could not be any particular thing such as water or fire but something 'uncreated and imperishable'. This substance was called the Indefinite or the Boundless. Another Milesian, Anaximenes, declared that the original material of the universe is air. Air when rarefied became fire; when condensed it turns successively to wind, vapour, water, earth, and stone. The philosophy of the Milesian school was significant as it broke through the mythological beliefs of the Greeks about the origin of the world and substituted purely rational explanations.

The Pythagoreans developed a metaphysical outlook of the world before the end of the 6th Century BCE. It was founded by Pythagoras, the legendary mathematician, from Croton. They turned attention to the soul and elaborated a doctrine of transmigration and reincarnation. They interpreted philosophy largely in terms of religion. They stressed upon individual being purified of the evil desires of the flesh to lead a good life. The essence of things for them was not a material substance but an abstract principle, number. Their chief significance lay in the sharp distinctions they drew between spirit and matter, harmony and discord, good and evil, which made them the

founders of dualism in Greek thought. They intensified the debate over the nature of the universe.

Atomists were a group of philosophers who gave a final alternative to the question of the underlying character of the universe. The founder of this atomist theory was Democritus, who lived in Abdera in the second half of the 5th Century BCE. The atomists believed that the ultimate constituents of the universe were atoms, infinite in number, indestructible, and indivisible. Despite being different in size and shape, they were exactly alike in composition. Because of the motion inherent in them, they were eternally uniting, separating, and reuniting in different arrangements and thus every object in the world were product of different combination of atoms. This philosophy finally realized the materialistic tendencies of the early Greek thought. Democritus denied the immortality of the soul and the existence of any spiritual world.

A revolution occurred in Greek philosophy in the second half of the 5th Century BCE, which was completely identified by one man, Socrates, and so his predecessors are collectively known as 'pre-Socrates'. Socrates believed that man's soul was the seat of his rational faculty, and the essential factor which distinguished man from the beasts. Along with the rationality the soul also had irrationality inherent in it and the great problem for man was to become truly human, that is, to allow rational elements to dominate and control the other. Love, friendship, piety, and immortality were among important subjects of the Socratic philosophy, but above all these was, justice. Politics and justice were always linked but it was Socrates who introduced radical and systematic ways in which the issues were examined. He insisted on, that politics and all behaviour must be rationally guided and judged by absolute ethical norms. In 399 BCE he was condemned to death on a charge of 'corrupting the youth and introducing new gods'. The real reason was for this unfortunate sentence was the tragic outcome for Athens of the Peloponnesian War.

Since Socrates wrote nothing himself, it was difficult for the historians to exactly determine his teachings. Plato, the disciple of Socrates, on the other hand was a prolific writer and most of Socrates views were known from his writings. In Plato's understanding and to the mainstream of Classical Greek philosophy after him, was that men were created unequal, not only in physique, wealth or social position, but also unequal in their souls. It was therefore few potential men who were completely capable of rational behaviour and hence, correct moral judgement; most men were not. The reason for this was rooted in Plato's metaphysics and in his notion that there were absolute goods and absolute truths, which were known by some correct men through their correct education. His thoughts have been elaborately dealt with in his book the *Republic*. His other noted works were such dialogues as the *Apology*, the *Phaedo*, the *Phaedrus*, and the *Symposium*. Plato's ethical and religious philosophy was closely related to his doctrine of Ideas. Like Socrates he also believed that the true virtue had its basis in knowledge. Plato, as a political philosopher, was motivated by the ideal of forming a state which was free from turbulence and self-seeking on the part of individuals and classes. In his book the *Republic* thus, he divided the society into three main classes according to the functions of the soul. The lowest class, represented the appetitive function, which included the farmers, artisans, and merchants. The second class, represented the spirited element or will, consisting of the soldiers. The highest class, represented the function of reason, composed of intellectual aristocracy.

The last of the great champions of the Socratic tradition was Aristotle, a native of Stagira, born in 384 BCE. He entered into Plato's Academy (the grove of Academus, where Plato and his disciples met to discuss philosophic problems) at the age of seventeen. He studied as well as later taught there for twenty years. In 343 BCE he was invited by Philip of Macedon to teach his son Alexander. Seven years later he returned to Athens and started a school of his own, known as Lyceum, until his death in 322 BCE. Aristotle wrote more voluminously than Plato on variety of subjects including treatises on logic, metaphysics, rhetoric, ethics, natural sciences, and politics. Continuing the traditions of Socrates and Plato, he too believed in absolute knowledge and eternal standards. But he believed more in the concrete and the practical. He was an empirical scientist with a compelling interest in biology, physics, and astronomy. He was less inclined than his predecessors to a spiritual outlook. Also, he did not share their strong aristocratic sympathies. For him form and matter both were of equal importance and were eternal, and neither could exist without the other. The union of these two gave universe its character. Aristotle proposed ethical philosophy of the *golden mean*, where he suggested to preserve a balance between excessive indulgence on the one ascetic denial on the other. This was simply a reaffirmation of the characteristic Greek ideal of *sophrosyne*, 'nothing too much'.

14.2.2 Art and Architecture

14.2.2.1 Art

The Greeks were materialistic and conceived the world in physical terms. There were few like Plato who thought it in spiritual way. So, naturally people found that the material emblems of art and architecture exemplified best the ideals the Greeks maintained. They reflected the basic character of Hellenic civilization. The Greek art symbolized humanism and glorified man as the most important creature in the universe. Though most of the sculptures were of gods and goddesses but they all portrayed humanistic qualities. The Greek deities existed for the benefit of man and thus, in glorifying them they glorified himself. Sculpture and architecture, both embodied the ideals of balance, harmony, order, and moderation. Thus, Greek art was simple and dignified without much decorations and represented national life. Its purpose was merely aesthetic but political, to symbolize the pride of the people in their city at large and to enhance their consciousness of unity. For example, the Parthenon at Athens, was the temple of Athena, the protecting goddess who presided over the corporate life of the city. The beautiful temple provided her place in the city and people's love for their city and its welfare could be maintained.

Greek art has been divided into three broad periods. The first covered the 7th and the 6th Centuries BCE when the Archaic Period was much influenced by the Egyptian art, mostly in statue making. The statues were with square shoulders and one foot slightly advanced. The major architectural style also originated in this period, and several crude temples were built. The second period, in the 5th Century BCE, the Greek art and architecture witnessed the full perfection. The art of this period was completely idealistic. In the last period, during the 4th Century BCE, the art and architecture lost some of its balance and simplicity and sculpture assumed new features. It became more individualistic and realist shifting focus on individual artist and his visualizations losing some of the expressions of civic pride.

14.2.2.2 Architecture

Most of the significant buildings were concentrated in the cities which were fortified. But irregular in planning. The idea of regular plan was established by Hippodamus, a Milesian in about 5th Century BCE. The temples were the best example of artistic expression in Greece. Marble, brick and limestones in different colours of reds, blues, and other bright colours were used. Greek temples consisted of five elements: (1) the cella or nucleus of the building, rectangular in shape to house the statue of the god; (2) the columns, which formed the porch and surrounded the cella; (3) the entablature, which rested upon the columns and supported the roof; (4) the gabled roof itself; and (5) the pediment or triangular section under the gable of the roof. The three architectural styles were followed-Doric, Ionic, and Corinthian. The more common was Doric style, which made use of a heavy, sharply fluted column surmounted by a plain capital. The Ionic, had slenderer and more graceful columns with flat flutings, a triple base, and a scroll or volute capital. The Corinthian style was more ornate than the Ionic. The Parthenon is the best example of Greek architecture, which was a mix of both Doric and Ionic styles.

14.2.2.3 Sculptures

Greek sculpture gained its height in the work of Pheidias (c. 500-432 BCE). His masterpieces were the statue of Athena in the Parthenon and the statue of Zeus in the Temple of Olympian Zeus. He also designed the Parthenon reliefs. He actually exemplified perfectly the link between sculpture and architecture. The qualities of his work are grandeur of conception, patriotism, proportion, dignity, and restraint. Almost all his figures idealised representations of deities and mythological creatures in human form. Another most renowned sculptor of 5th Century BCE was Myron. He was most appreciated for his statue of the discus thrower and for his glorification of other athletic types. Some other famous sculptors in the 4th Century BCE were Praxiteles, Scopas and Lysippus.

Check Your Progress (CYP)-I

On the basis of your understanding of the previous sections, answer the following questions in your own words:

Q 1. Analyse the work of Milesian School.

Q 2. Examine the development of Prose in Greek literary culture.

Q 3. Trace sculptural art in Ancient Greece.

Multiple Choice Questions:

1. *Iliad* and *Odyssey* by

- (a) Homer
- (b) Herodotus
- (c) Plato
- (d) Socrates

2. Plato and Aristotle were disciples of

- (a) Democritus
- (b) Herodotus
- (c) Socrates
- (d) Aristophanes

3. Who is called 'Father of Medicine'?

- (a) Hippocrates
- (b) Socrates
- (c) Aristotle
- (d) Ptolemy

4. Who established Lyceum?

- (a) Plato
- (b) Aristotle
- (c) Pythagoras

- (d) Thucydides

5. Statue of Athena designed by

- (a) Praxiteles
- (b) Scopas
- (c) Lysippus
- (d) Pheidias

14.3 ART AND CULTURE IN ANCIENT ROME

Culture in Rome was not only a product of indigenous values and beliefs but was also deeply influenced by Etruscan, Italian and Greek cultures. Since the Roman empire had vast territorial expansion, it encompassed diverse ethnic and intellectual background with their own distinct artistic and literary traditions. The Romans encompassed these traditions and formed a cultural synthesis but still preserving its own identity. The three major components of the Roman culture included art, architecture and literature.

14.3.1 Culture in Early Rome and the Republic

Early Roman culture was much influenced by the Etruscans, who themselves formed a part of the common central Italian culture. Later as the Empire began expanding, it embraced Greek culture too. The art of Rome was mostly an importation from the Hellenistic East. Conquering armies came back with wagonloads of statues, reliefs, and marble columns after plundering Greece and Asia Minor. These became the property of the aristocrats who used it to decorate their mansions. As the demand increased, hundreds of replicas were made, to an extent that Rome came to have a profusion of objects of art with no more cultural significance by the end of the Republic. It was only in the national glory which surrounded the early Principate that stimulated the growth of an indigenous art.

Architectural techniques in early Rome borrowed elements such as arch and vault from the Etruscans. The Etruscans used these in their buildings. Arches and vaults were formed by projecting out the course of stones on each side of the opening in a stepped pattern until both sides met at the top. This method was known as corbelling. Architecture in Rome was monumental, designed to symbolize power and grandeur. By 3rd century BCE, round arches were used to build massive city gates, grain storage houses, sewers and bridges. Also, massive stone temples of the main deity were constructed at the centre of the city which was again derived from the Etruscans. The Etruscan temple's structure on the other hand was influenced by the Greek architectural style. The material most commonly used were brick, squared stone blocks, and concrete, the last of a Roman invention. Central Italy had abundant supply of volcanic tufa and high-quality limestone-the essential ingredients of concrete. Thus, concrete began to be used more and more as the construction material. Other art forms such as painting, sculpture and most important the gladiatorial fights, all reflected Etruscan imprint.

Literature however, did not grow much in the early Roman period and was confined to framing laws, treaties,

keeping financial records, noting important religious and secular events and writing funerary inscriptions. Philosophy however, initially was adopted under Hellenistic influence. Some of the literary writings during this time were the rude comedies of Plautus (257-184 BCE), and Terrentius (195-159 BCE) was derived from Greek theatre with respect to plots, themes and characters even though backed by the local Italian traditions. The works of these two writers represented the great cultural, social and economic changes affecting Rome with the acquisition of the status of an Empire. They also became popular since the themes of their writing found connection with the daily lives of the Romans such as slave characters, conflict between father and son, husband and wife, which had become marked feature of the new cosmopolitan Rome.

The earliest Roman historiography was known as *annals* since the historical details were compiled on yearly basis like the official records of the Pontiffs. Roman analysts were Fabius Pictor and Lucius, who narrated Roman political achievements in Greek language for the Greek public. Initially most of the writings were in Greek since it was only the Greek model of literature that was available to the Romans. However, later historians such as Cato the Elder (239-149 BCE) wrote in Latin in his famous book *Origines* (The Origin). He wrote books also on law, medicine and agriculture.

Patriotic poems also began to be written. Rome's first nationalist poet was Gnaeus Naevius (270-199 BCE), who proficiently wrote tragedy, comedy, epic and satire, and were unique to the Roman literature. Another famous poet Ennius (239-169 BCE) was also involved in writing tragedy, comedy and epic. His most popular work was *Annales*, a patriotic epic poem based on the tales of the Roman past and the Second Punic War. These two poets glorified the Roman history and unique Roman values, against the popular view of continued Greek influence.

Epicureanism and Stoicism gained much popularity among the upper-class Romans. The most renowned of the Roman exponents of Epicureanism was Lucretius (98-55 BCE), who authored a philosophical poem entitled *On the Nature of Things*. In this poem he explained the universe in such a way as to remove all fear of the supernatural, which according to him was the chief obstacle to peace of mind. His conception of good life included 'peace and a pure heart'. Another philosophy, Stoicism was introduced into Rome about 140 BCE and soon received numerous converts from the influential leaders of public life. The greatest of these was Cicero (106-43 BCE). Cicero believed in virtue as sufficient requirement for happiness and tranquillity of mind as the highest good. Cicero diverged from the Greek Stoics and approved of active political life. He wrote in rich and elegant Latin prose style that has never been surpassed. Though not a truly great thinker but was the most influential Latin transmitter of ancient thought to the medieval and modern western European worlds. Lucretius and Cicero were the two leading exponents of Greek thought but not the only ones. In the later Roman Republic learning became fashion within the upper classes who began to reproduce in Latin.

By this time writings were in both Greek and Latin. While history writing became more Latinised, annalistic approach of writing history continued to be followed by some. The two famous historians of this period were Sallust (86-34 BCE) and Julius Caesar (100-44 BCE). The crisp military memoirs of Julius Caesar were his attempt to glorify himself. The opening of his memoirs was remembered by all beginning students of Latin as well

as use them as the pledge of allegiance. Another area of writing in the late Republican period was the passionate love poems of Catullus (84-54 BCE). This was the period when aristocratic poets known as *poetae novi* (new poets) emerged.

14.3.2 Culture Under the Principate

The diversity in intellectual and artistic interests under the period of the Principate outshone all other ages in the history of Rome. From 27 BCE to about 200 CE, the Roman philosophy attained its highest peak. The same period also witnessed the production of outstanding literary works, the growth of distinctive architecture and art, and the greatest achievements in Roman engineering. This was supposedly the 'Golden Age' not only for political growth and peace of the Roman empire but also for the Roman culture. The establishment of the *Pax Romana* under Augustus Caesar, inspired economic and cultural development in the empire.

The form of philosophy that appealed most strongly to the Romans was Stoicism. The reason behind its popularity was the philosophical attributes such as self-discipline, duty and subjection to natural order of things. Stoicism went well with the ancient Roman virtues and their habits of conservatism. Moreover, it insisted on civic obligations and cosmopolitanism which appealed to the Roman political-mindedness and pride in the world empire. But Stoicism during Principate was different from that of Zeno and his school. Zeno was the founder of the philosophy of Stoicism. Stoicism in Rome assumed a more distinctly religious tone than that which had characterised the original philosophy. The three prominent scholars of Stoicism who lived during the period of Principate were Seneca (4 BCE-65 CE), a millionaire adviser to Nero for some time; Epictetus, the slave (60-120 CE); and the Emperor Marcus Aurelius (121-180 CE). They all believed in inner serenity as the ultimate goal. The true happiness according to them was only in surrender to the benevolent order of the universe. Seneca and Epictetus added deep mystical desires to their philosophy almost making it a religion. For them cosmos was the divine and worthy of worship since it was governed by an all-powerful Providence who commanded all that happened for the ultimate good. The last of the Roman stoics, Marcus Aurelius, was more fatalistic and less hopeful. He believed in living a moderate life with no gross indulgence nor break down in angry protest. He suggested dignified resignation to suffering and tranquil submission to death.

Roman literature was related to their philosophy, especially for the works done by the distinguished writers of the Augustan Age. Virgil (70-19 BCE), Horace (65-8 BCE), Tibullus (55-19 BCE), Propertius (54-15 BCE), Ovid (43-18 BC) and Livy (59 BCE-17 CE) were some of the popular scholars who received patronage from Augustus. Virgil was much more a Stoic but his book called *Eclogues* conveyed the idea of Epicureanism. His utopian vision of an age of peace and abundance, his brooding sense of the tragedy of human fate, and his idealization of a life in harmony with nature indicated an intellectual heritage similar to that of Seneca and Epictetus. Virgil's most popular work, the *Aeneid*, glorified Roman imperialism. The *Aeneid* in fact was an epic of Empire reflecting on the toils and triumphs of the founding of the state, its glorious traditions and its magnificent fortune. Horace was another popular scholar whose *Odes* drew large amounts of teachings from both Epicureanism and Stoics. He confined himself to the doctrines of a way of life. He combined in his philosophy both the Epicurean justification of pleasure and the Stoic bravery in the face of trouble. Horace's *Odes* also glorified Roman imperialism.

The other major writer of the Augustan Age was Ovid. He was the chief representative of the cynical and individualist tendencies of the period. His brilliant and witty writings often reflected the corrupt practices of his time. He was also an expert on love elegies and mythology, and was considered as the most prudent of Augustan Age poets.

Livy was famous for his writings in a prose style. As a historian he was more fanciful and his main work, *Ab Urbe Condita*, is a collection of 142 books on Roman history, was full of dramatic and picturesque narratives, designed to appeal to the patriotic emotions rather than to present accurate details. Livy has been criticised by modern scholars for several lacunas in his writing as a historian but his gripping portrayal of the Roman history made him popular among the Romans. Pompeius Trogus (50 BCE-25 CE) was another contemporary historian of the time, who wrote *Philippic Histories*. His text provided historical details from a regional/provincial perspective not centred in Rome. During the Principate, not only Roman scholars were writing about Rome but Greek scholars were also writing on Rome and flourishing equally. Dionysius, wrote *Roman Antiquities* and Strabo, whose historical works have been lost but his book *Geography* is still considered the best.

Literature after Augustus exemplified conflicting social and intellectual tendencies. The stories of Petronius and Apuleius and the epigrams of Martial described the more exotic and sometimes ignominious aspects of the Roman life. These authors aimed just to tell an entertaining story or turn a witty phrase and not instruct, or uplift the society. An entirely different viewpoint was presented in the works of other most notable scholars of this age: Juvenal, the satirist (60-140 CE), and Tacitus, the historian (55-117 CE). Juvenal was influenced by Stoicism but with narrow vision. He highlighted the moral degeneracy which had spread in the Roman society and which led to the troubles in the nation. Similar attitude was seen in the writing of his younger contemporary, Tacitus. Tacitus, the best-known of the Roman historians, described the events of his age largely for the purpose of bringing forth the moral deterioration. His work *Germania*, was the description of the customs of the ancient Germans which was written to highlight the contrast between the manly virtues of an unspoiled race and the effeminate vices of the decadent Romans. His writings were infused with ironic wit and brilliant aphorism.

During the period of the Principate, Roman art too assumed its distinctive character. The vibes of national glory surrounded the early Principate which stimulated the growth of an art that was more indigenous. Augustus himself claimed that he found Rome a city of brick and left it a city of marble. Architecture and sculpture were the most prominent expression of arts in Roman culture. Architecture was monumental and designed to symbolize power and splendour. The technique of the round arch, the vault, and the dome were learnt from the Etruscans and were already used in the monuments. Sometimes the Corinthian column was employed in the monuments, especially in the construction of temples. The Romans used brick, squared stone blocks, and concrete for their construction material. Among these raw materials concrete was their invention. Also, to further adorn the public buildings, sculptured entablatures and facades, were built up of tiers of colonnades or arcades. Roman architecture was primarily devoted to utilitarian purposes. The most noted examples were the government buildings, amphitheatres, baths, race courses, and private buildings. Nearly all were massively and strongly constructed. The Pantheon were the most magnificent and grand of all buildings. They were constructed with dome having a diameter of 142 feet, and the Colosseum, which could accommodate 65,000 spectators at the gladiatorial combats.

Sculpture during the Principate was another field of art popular with the Romans. Its main forms were the triumphal arches and columns, narrative reliefs, altars, portrait busts and statues. The Roman sculptures were distinct in its characters due to individuality and naturalism. Sometimes the statues and busts were made to express only the vanity of the aristocracy. However, the best Roman sculptured portraiture conveyed qualities of simple human dignity similar to those embraced in the philosophy of the Stoics.

Apart from the achievements in architecture the Romans also made advancements in engineering and public works. The imperial Romans built excellent roads and bridges, many of which survive even in the present times. During the time of Trajan, eleven aqueducts brought water into Rome from the nearby hills and provided the city with nearly 300 million gallons daily. The water brought into the city was used for drinking and bathing as well as for flushing a well- designed sewage system. Water was also intelligently funnelled into the homes of the rich and aristocracy for their private gardens, fountains and pools. Alongwith, beautifying the city of Rome, the Romans also established the first hospitals in the Western world and the first system of state medicine for the benefit of the poor.

The Romans achieved great heights in engineering, art and architecture but lacked similar accomplishments in the field of science. It has been popularly joked in the saying that the Romans excelled in drains, not brains. There was not much original scientific discovery in the Roman empire. They failed to build on the Hellenistic foundations and neglected their opportunity since they hardly had any interest in knowing about the natural world in which they lived.

Speaking about culture, while the Greeks entertained themselves with theatre, the Romans showed passion for cruelty through Gladiatorial combat. It was like the exhibition of human slaughter. The spectacle during the Principate had become bloodier than the times of the Etruscans and the Republican period. The most popular amusement of all was watching gladiatorial combats in the Colosseum or in other amphitheatres capable of accommodating thousands of spectators. It was organised on such grand scale that even the emperors and aristocrats got involved personally. Most of these gladiators were condemned criminals or slaves but there were volunteers from respectable classes too. Commodus, the son of Marcus Aurelius, himself entered the arena several times for the sake of praise from the mob.

14.3.3 Roman Culture During the Third Century Crisis and After

During the 3rd century CE, Rome was passing through a deep crisis politically and this impacted the culture as well. Scholars see it as the period of decline. The trade and commerce were disrupted, Roman ranks were thinned by disease, agricultural yield had declined, towns and cities had declined and the Germanic tribes were breaking the Roman defense lines. Hence, the culture of the 3rd century CE was marked by pervasive anxiety. The expressions of worry could be seen in the surviving statuary, as in the bust of the Emperor Phillip the Arab (244-249 CE), who appeared almost certain that he would soon be killed in battle. We need to realise that this was the time when nearly 20 emperors were humiliated and murdered.

Suiting the spirit of the age, the Neoplatonic philosophy of the world beyond came to the fore. Neoplatonism

(meaning 'New Platonism') drew the spiritualist tendency of Plato's thought to extremes. The real founder of Neoplatonism was Plotinus, who was born in Egypt about 204 CE but in the later years of his life he taught in Rome. He won many followers from the aristocracy before dying in 270 CE. 'Emanationism' was its first basic philosophy which meant that everything that existed emanated continuously from the God. The initial stage in the process is the emanation of the world-soul followed by the divine Ideas or spiritual patterns, and then the souls of particular things. The final emanation was the matter. The second major doctrine was 'Mysticism' which believed that human soul was originally a part of God, but separated from its divine source through its union with matter. Hence, the highest goal of human should be the mystic reunion with the divine. Finally, 'Asceticism' was the third main teaching which acted as the path to lead to the mystic reunion. Neoplatonism became so popular in Rome in the 3rd and 4th centuries CE, that it almost completely supplanted Stoicism.

Architecture during this period flourished with a number of new buildings being added to the Imperial residence under the rulers of Severan Dynasty. The Arch of Septimius Severus in the Forum is prominent among them. Sculpture, especially on the coins formed another medium of showing royal power. Portraits, relief structure and other art forms experienced the effect of Christianity. Painting continued to progress as murals on walls of public buildings, tombs, Christian and Jewish synagogues, churches, temples as well as homes. The floors were ornamented with beautiful mosaic. In the literary field, prose dominated over poetry and poetry confined to the life of rural aristocracy. Nemesianus was the most prominent of the Latin poet in the 3rd century CE. Much like the other art forms the Greek prose too flourished around the theme of love, adventure, disaster and so on. Popular among the prose writers of romances were Heliodorus, Longus and Xenophon.

Roman art, architecture and literature changed and developed remarkably in the 4th century CE, under the Dominate rulers. The rising Christian population and their organisation acted as the booster. Great building activities were undertaken by Diocletian and Constantine. Diocletian initiated restoration process of the Imperial power under which he built several magnificent monuments and palaces including baths at Rome. Maximian expanded Milan (Northern Italy) which he turned into his Imperial residence. Constantine is credited with not only having restored earlier buildings but also construction of new massive baths, arches bearing his name and completion of a huge basilica. For example, St. Peter's Basilica at Rome is considered to be the greatest of the churches built by Constantine. Constantine also contributed to the construction of large number of churches both in and outside Constantinople. Similarly, the sculpture and paintings were dominated by the Near East. The sculptures were now flatter with spiritual qualities. The realism and naturalism of the Greek style was replaced by the Near Eastern conventionalism. However, the classical tradition of realism also continued alongside. The features of reliefs and sculptures of the times of Trajan, Hadrian and Marcus Aurelius came to be reused under Constantine.

Paintings however, continued to depict the Greek traditions of decoration of walls with paintings and mosaics. Wall paintings were limited to small figures drawn with brush strokes known as 'columbarium' style. Once Christianity became the state religion the Christian art also followed the similar traditions. The cultural synthesis of native Roman and Christian traditions was found even in the literature. Claudian, was considered as one of the last great poets of ancient Rome who was famous for his panegyric court poetry.

Check Your Progress (CYP)-II

Fill in the blanks:

- a) Architectural techniques in early Rome, borrowed elements such as arch and vault from the
- b)conception of good life included 'peace and a pure heart'.
- c)was famous for his writings in a prose style.
- d) Augustus himself claimed that he found Rome a city of brick and left it a city of
- e) The earliest Roman historiography was known as

14.4 LET US SUM UP

The lesson discusses about art and cultural traditions of the Greco-Roman empire. The architectural styles of Greece and Rome have produced some of the most endearing monuments and structures which are admired even in the modern times. The Greek literature particularly is vast and has given the world its modern forms such as poetry, prose, drama, tragedy, comedy etc. Historical writings of Ancient Greece and Rome has helped historians fix historical chronology. In Ancient Rome the period of Augustus is seen as the Golden Age, since maximum development in art, architecture and literature happened. Marble was used for most of the constructions during Augustus. The Roman cities were full of amphitheatres, government buildings, baths, aqueducts, temples, race courses and private houses. The emperors built marvellous roads, bridges, many of which still survive. The Roman architecture was monumental, designed to symbolize power and grandeur. It is also to be learnt that Greek culture was inspired by lifeways of people while Roman culture by its philosophy. Thus, we see Greco-Roman art and culture encapsulated in itself utility as well as grandeur and monumentality.

14.5 GLOSSARY

Sophists: Intellectual and wise group of people.

Elegy: A form of poem with sadness or grief.

Satyr: Greco-Romangods represented as man with look like horse or goat respectively.

Scepticism: Philosophy of doubt or questioning attitude.

Principate: The beginning of Roman empire under Augustus Caesar who continued some features of the Republic.

Pax Romana: Roman peace.

Aphorism: A general truth or principle said in short, concise and witty way.

14.6 EXAMINATION ORIENTED QUESTIONS

Short Questions

- Q1. Discuss the development of drama and tragedy in Greek Culture.
- Q2. Trace the evolution of Greco-Roman poetry.
- Q3. Explain Neoplatonic philosophy during 3rd Century in Ancient Rome.
- Q4. Write a short note on literary tradition in Rome under the Principate.
- Q5. Highlight the impact of Etruscans on the early Roman architecture.

Long Questions

- Q1. Throw light on the various aspects of Greek culture.
- Q2. Discuss the importance of art and architecture in Ancient Greece and Rome under the Principate.
- Q3. Highlight the important features of philosophical development in Ancient Greece.
- Q4. Analyse the development of literature in Ancient Greece and Rome during Augustus Caesar.
- Q5. Discuss the distinct features of Greco-Roman culture.

14.7 LESSON END EXERCISES

- Q1. Trace the evolution of comedy in Greek culture.
- Q2. Evaluate the development of art, architecture and literature during Dominate rulers.
- Q3. Discuss the importance of Plato in Greek literary tradition.
- Q4. Explain Epicureanism and Stoicism during Roman Republic period.

14.8 ANSWER KEY

CYP-I

- Q1. See sub-sub-section 14.2.1.5
- Q2. See sub-sub-section 14.2.1.4
- Q3. See sub-sub-section 14.2.2.3

Multiple Choice Questions:

1. (a) 2. (c) 3. (a) 4. (b) 5. (d)

CYP-II

Fill in the blanks:

- a) Etruscans
- b) Lucretius
- c) Livy
- d) marble
- e) *annals*

14.9 SUGGESTED READINGS

- Anderson, Perry. 1978. *Passages from Antiquity to Feudalism*. London.
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STATE AND EMPIRE

SEMESTER-I

COURSE NO. HIST104

UNIT-III

LESSON 15

RISE OF SLAVERY

STRUCTURE

- 15.0 Learning Objectives and Outcomes
- 15.1 Introduction
- 15.2 Origin of Slavery
- 15.3 Slavery in Sparta and Greece
 - 15.3.1 Slavery in Sparta
 - 15.3.2 Slavery in Athens and other Greek States
- 15.4 Slavery in Rome
 - 15.4.1 Origin of Slave Society in Rome
- 15.5 Let us sum up
- 15.6 Glossary
- 15.7 Examination Oriented Questions
- 15.8 Lesson End Exercises
- 15.9 Answer Key
- 15.10 Suggested Readings

15.0 LEARNING OBJECTIVES AND OUTCOMES

Learning Objectives

The objective of this lesson is to enable you to:

- Understand the terms such as slave, slavery, *Latifundia* etc.

- Analyse the reasons for the origin of slavery in Greco-Roman society.
- Trace the difference between Greek and Roman slavery.
- Evaluate the role and importance of slaves in Greco-Roman society.

Learning Outcomes

After going through this lesson, you will have clear understanding of:

- Meaning behind different terms related to slaves.
- Reasons for the origin of slavery in Greco-Roman civilization.
- Fundamental features of a slave society.
- Institutionalisation of slavery system in Ancient Greece and Rome.

15.1 INTRODUCTION

Dear learners, slave-labour as a tool of production in different sectors of economy was a distinctive feature of the ancient Greco-Roman civilizations. Large number of slaves were found even in the other ancient civilizations such as the Egyptian, Mesopotamian, Persian and the Hittites. Slavery was institutionalised in the Mesopotamian and Hittites civilization as seen from their law codes. But the Greco-Roman slavery system was qualitatively and quantitatively different from these earlier civilizations. Till now in the history of human social formation, human labour in the form of slaves, was never used on such extensive scale for production as in the ancient Greece and Rome. Initially the slaves were the prisoners of war and those enslaved in the condition of non-payment of debts, leading to debt bondage. But above all wars kept supplying large number of slaves and initially these were women.

15.2 ORIGIN OF SLAVERY

In the Near Eastern Antiquity, slavery had always existed in different forms and was based on the idea of ‘free’ and ‘unfree’. So, it had originated during the time of chieftaincy clashes when the war captives were forced to work in severe conditions, and thus formed the first group of slaves. Gradually as state systems emerged with power concentrating into the hands of king, aristocrats, and temples, the required labour force for constructing temples, tombs, work on agricultural fields, in mines, and other areas were provided by force of arms or through laws and customs. The economies of earlier ancient Civilizations- the Sumerian, Babylonian, Assyrian and Egyptian, were not depended on slaves, and therefore had no legal systems to define an exclusive conception of chattel property. Gerda Lerner (1987) suggested that the slavery originated from the beginning of the patriarchy. He opined that patriarchy grew with subjugating women which later extended to other fellow human beings, finally culminating into slavery. Elaborating her view, she explained that since men were mostly skilled fighters, keeping them in captivity and developing an artificial relationship was difficult, women on the contrary could be easily controlled and forced to bear child, limiting their movement and stopping them from eloping.

Slave societies have two principal features: (i) the absolute number of slaves in relation to the population of the society and (ii) their significant roles in the economic sector of the society. Besides these features, three other components of slavery have been identified by the scholars—(a) status of slave as a property, (b) having no family or kin, and (c) complete control over them. These features indicate merciless exploitation of the slaves. Marxists viewed this in the context of slave mode of production where slaves were not simply labourers but had converted into commodity themselves. Since slaves could be sold, bought, and shifted within various sectors to conduct variety of tasks after training, it also helped in keeping the wages low among other hired workers and craftsmen by providing an alternative workforce. But, at the same time, slave labour choked any major technological inventions which could drive forward any qualitative new forces of production in the Ancient economy.

City-states in the Ancient Greece were the first to manifest slavery in its absolute form and dominant on such huge scale, transforming it from a subsidiary form into a systematic mode of production. Perry Anderson (1974) suggests that the defining innovation of the Greco-Roman world was the slave mode of production. The chattel slavery practiced in Greece and Rome was considered an extreme form of servitude in antiquity in which slaves were considered a property which could be bought, sold or disposed-off. They were denied any rights except to be alive that too depended on the master, and their condition was described as attaining the status of ‘social death’. It was in this context that Greco-Roman societies were marked as the genuine slave societies.

M. I. Finley (1980) had proposed two essential preconditions when slavery could become widespread in an agrarian society. Firstly, in case of situation when there is disbalance between demand and supply of labour internally, then the landed aristocracy looked for cheaper work force from outside. Secondly, large amount of landed property was concentrated in the hands of a small group of landed aristocrats on the one hand, while large number of free peasants were always present as well. When large number of lands were held by a few elites, the demand for labour increased and the free peasantry could not be employed in those fields. In such a situation the landed aristocracy would cover up the deficit by importing labour from outside. Nature of slavery in Greece had similar preconditions as Perry Anderson (1974) suggested that the Hellenic world in the classical age was never dependent completely on the use of slaves. Craftsmen and artisans in the cities, free peasants, and dependent tenants, had always coexisted with slaves, in different proportions, across various city-states of Greece. Also, the two types of slavery, helotry and chattel slavery were distinctly different and originated in different historical circumstances.

15.3 SLAVERY IN SPARTA AND GREECE

The Greek civilization was an urban civilization with city-states as its political organisation but essentially based on agriculture with slave labour providing the foundation. During the Mycenaean period, in palaces women formed a strong work force and the slaves are referred as *doeri* in the B tablets. Homer in his epics too, provides numerous references about women being enslaved during wars. By the Archaic and Classical Period production in every sector, particularly, handicrafts, mining and agriculture had slaves working. Some scholars though have debated over the role of slavery in Greek agriculture to be an exaggeration and that it mainly depended on the peasantry and the free labour. As the Dark Age neared its end, slaves were already employed on an unprecedented

scale in Sparta. Also, the great revolution in thought, urban culture, art, and politics that emerged in the 6th-5th centuries BCE in the city-states of Athens, Chios, Aegina, Corinth etc found its base on slavery.

15.3.1 Slavery in Sparta

A large hinterland of the Peloponnese region was captured by the city-state of Sparta in the 8th century BCE. Laconia towards the east was the first to be captured followed by Messenia to the west, and the entire population of both the regions were enslaved. This was a unique form of slavery, that the Spartans introduced to the human society, which was called '*helotry*'. The State here was the major force owning the helots collectively. It was basically not a fully developed form of slavery as they could not be manumitted, bought or sold. The State distributed holdings of agricultural land called *kleroi* or allotments to the Spartan citizens in Messenia. The land possessed by the Spartans prior to these new allotments and the holdings provided after the capture of Messenia, both were now cultivated by the helots. A considerable social differentiation already existed in Sparta due to which distribution of *kleroi* were not equitable with aristocracy securing larger share of lands. The distribution of the helots was regulated by the state. The state assigned a certain number of slaves to each family depending upon its requirements for labour. They were also allowed to maintain family ties in contrast to other types of slavery in ancient Greece. A child born in the family of helots continued to have status similar to their parents suggesting that the Messenians and Laconians became a continuous source of slave labour in Sparta for many generations to come. Any assumption about *helotry* being a more humane form of slavery as suggested by some scholars, is not to be believed. Infact the backwardness of the Spartan economy is quite reflective in this more primitive form of slavery. Helots could not be bought or sold, they could not be freed, except by the state, and most revealing of all, they were self-perpetuating.

In Sparta private property was not fully developed and the society still consisted of many tribal customs. Slave labour in the form of helots existed in other Greek city-states as well, for example in Thessaly, it was known as *penestae*, in Crete and Argos were known as *mnoiti*. However, many other city-states of Greece followed the system of owning slaves privately and which became typical of Greek society and economy. Among a large number of terms used for describing such slaves, *doulos* is the most common. But *helotry* was different in form and nature than the chattel slavery or the other forms of slavery. Besides working in the fields, the helots also worked as domestic labour and herding flocks of sheep. Laconians and Messenians worked on their own lands and were the primary producers of Sparta. While in other parts of Greece, slaves worked on the fields acquired by the conqueror in different regions. P. Cartledge (2011) opined that the helots provided the food supplies which allowed Spartans to lead a military life. Apart from producing food, payment of a compulsory rent of 50 per cent of the produce was to be made by the helots to their master on every plot which they farmed. This rent was to be paid each year to both the male master amounting to 70 measures of barley and 12 measures to the mistress. In addition, master was also given the same amount of fruit and other produce. Apart from agriculture, helots were also employed in iron mines in Messenia, served as armed guards, temporary soldiers acting as light auxiliary troops and followed their masters in hunting expeditions and military campaigns. There are also a few hints that in the post-Peloponnesian period, the freed helots could act as city or area governors.

The helots were treated much worse than that of the *doulos*, since Spartans were in minority and had to control a huge population which could be done through extreme repressive measures. Many a times helots themselves were employed to repress their mass rebellions. Spartans were deployed in disguise to check upon any plans of helot revolt. It was usual practice throughout most of antiquity, when a city or district was enslaved, to sell off the inhabitants and disperse them. The Spartans, however, had adopted the dangerous alternative of subjugating them at their native place, for which they had to pay a price. Whereas Greece at large was free from slave revolts, even where there were large concentrations as in the Attic silver mines, helot revolts were always smouldering and occasionally fierce. The emergence of Sparta as an armed camp kept the helots enslaved and prevented still more frequent rebellion. This development was more prominent after conquering Messenia since it was more thoroughly repressed. Soon after the middle of the 7th century BCE, the Messenian helots revolted; traditionally the conflict was called the Second Messenian War which took Spartans seventeen years to crush. It was due to this lesson that the Spartans learnt and which translated into a thorough social and constitutional reform of the Spartan system. Henceforth, the Spartans formed into a professional armed camp.

Scholars have assigned many reasons for the rebellious spirit of the Helots. They belonged to the same ethnic group and shared the feeling of solidarity since they were going through similar pain and loss of social and political freedom. This united feeling formed the motivating factor for uniting together. Another factor was geographical distance between Messenia and Sparta, which were separated by mountain chains, making it a challenge for the Spartans to maintain control over the Messenian helots. By population too, the helots in Messenia were overwhelmingly large in number than their Spartan masters. After Peloponnesian War as the Spartan empire expanded, it became all the more difficult to control the helots. In c. 464 BCE, Sparta faced a big earthquake in which a large number of Spartans were killed. This provided an opportunity to Messenians who launched a massive revolt for independence in c. 462 BCE. Still *helotry* continued, since men and women were engaged as domestic help in Spartan houses, mostly the Laconians. With passing time, they gained favour from their masters and mistresses and secured manumission. Also, the helots were massacred ruthlessly and in an organised manner during rebellions which dissuaded them from rebelling further. Finally, it was only in the early 4th Century BCE when an internal crisis was being faced by the Spartans giving Messenians an opportunity to gain their freedom. The Laconians however, still continued to live in servile conditions for next two centuries.

Helots, though categorised as ‘slaves’ were quite different from the chattel slavery of Athens and other Greek states. Looking at the slavery in Athens majorly, provides insight into the slaves and slavery in other Greek city-states.

15.3.2 Slavery in Athens and Other Greek States

Greece here represents Athens and other Greek city-states having similar nature of slavery. Private or individual ownership of slaves was the main characteristics of the Athenian slavery. Considered as property, these slaves could be bought and sold in the market as commodities. Athens prospered during the Classical Period broadly on the foundation of slave labour. By about 5th century BCE, the number of slaves in the classical *polis*, such as Corinth, Athens, Aegina and practically all the other important cities and metropolises contained large volume of

slaves, mostly outnumbering the free citizenry. Thus, its impact was not only economic but was crucial to the entire socio-political life of the citizens. The classical polis rested on a newly developed concept of liberty, which was sustained by an organised system of slavery. The slave labourers provided full freedom from labour to the free citizens. This newfound freedom led to development in new concepts and ideologies such as 'democracy'. By the 6th century BCE in Chios, the first democratic institution had emerged and it was also here that slaves were imported firstly in large number from the East. In Athens, slaves increased in large volume during the phase of tyranny and after the success of Solon's reforms.

Chattel slaves in antiquity were recruited not only by birth but also by continual import from outside. In Athens and other Greek states, in the Classical Period and up to the 3rd century BCE, slavery effectively replaced other forms of dependent labour. On the other hand, in the Archaic Age slavery was unimportant, and clientele, debt-bondage and other forms of dependent labour were more prevalent. Debt-bondage, even after it was abolished in Athens, remained widespread in many areas informally. One stimulus for chattel slavery came from the growth of urban production, for which the traditional forms of dependent labour were unsuitable. Slavery basically made significant inroads wherever helotage and other labours failed to survive or provide sufficient number to meet the needs of landowners. That is to say, in the absence of a free labour market, a slave labour force was imported, only when the existing internal force became insufficient, as after Solonic reforms in Athens. Regarding the number of slaves in Athens which is disputable and fluctuating, probably ranged somewhat between 60,000 to 80,000.

Slaves were mostly foreigners in different city-states and had gradations and defined roles in various occupations within larger non-citizen status of a slave. Finley specifies about production areas with mixed working population-free, unfree and those in bondage. According to him, free labourers were free only in the sense that they were not slaves and could not negotiate their terms and conditions like present times. Also, one in bondage status could easily convert into slave in case of non-payment of debt. In Rome too, chattel slavery existed in its extreme form and on a much larger scale than Greece. So, looking at the extent of slavery in both Greece and Italy, we find the first genuine slave societies in history, both socially and politically.

15.3.3 Slave System in Greece

The Greek language had an astonishing range of vocabulary for slaves-*doulos* (male slave), *andropodon* ('man footed thing', as opposed to *tetrapodon* 'four footed animals'), *oiketes* (related to *oikos* or a household), and *dmos* (captive slaves). Homer and Hesiod used *dmos* and *doulos* for slaves of which *dmos* gradually died out and *douleia* established as 'slavery'. Since slaves were regarded as a property or commodity, the Athenian law and custom, both gave freedom to slave owners to treat slaves in their own way. This was the case in most of the Greek states where chattel slavery existed. Slaves were captured and traded but not bred in chattel slavery. The breeding of human live-stock was not a good speculation. Most of the new born were killed or exposed. Slaves in chattel slavery had no family life and when one died a new one was purchased. In Greece, even the freedmen did not acquire the status of citizen and instead became *metics*, in contrast to Rome where they acquired full citizenship.

Slavery in Greece was institutionalised and was driven by its social ideology. Aristotle and other scholars justified

slavery. They suggested manual labour particularly for those who were not mentally capable or intellectual. This ideological thought among Greeks clearly indicate towards acceptance of slave system in the society without any guilt. Therefore, some sectors where heavy manual work was involved was seen as degrading whereas artisanry and craftsmanship fared better which can be seen working in paintings. Also, not all craftsmen were slaves, or had slave background. Manumission process was simple till second half of the fourth century BCE in Greece and was very common in Athens. To get manumitted a slave had to pay majority of his/her belongings, based on the Greek law which considered that all possessions belonging to a slave was his master's. In return the master announced publicly the slave's freedom. However, by end of the fourth century, Manumission became a complicated process where legal procedure was followed and Manumission amount was to be paid to the masters.

Since slavery was institutionalised in Greece, legal rules regarding slaves were elaborately laid down. Despite slaves having no legal rights, in Athens killing a slave invited god's wrath like killing any other person. This was also seen as religious pollution. Athens also had another specific law with regard to slaves, known as the law of *hubris*. Under this law, abusive behaviour towards slaves as well as citizens was discouraged. In Greece, there is hardly any distinction between a slave and a citizen in contrary to Rome. Since Athenians considered themselves to be civilised, unruly or rude behaviour against slaves was not acceptable by the citizens. This also made Athens a safe haven for runaway slaves from other Greek city-states. However, instances of brutal behaviour against slaves have been found in contemporary Greek works suggesting a contradiction. It is but to be seen that Greece never experienced any serious slave revolt in contrast to Rome.

Check Your Progress (CYP) -I

A. On the basis of your understanding of the previous sections, answer the following questions in your own words:

Q1. Elaborate on Gerda Lerner's view on origin of slaves.

Q2. Discuss *Helotry* in Sparta.

Q3. Describe chattel slavery.

B. Fill in the blanks:

- a) Slaves are termed as in the Linear B tablets.
- b) The State was the major force owning the collectively.
- c) The State distributed holdings of agricultural land called or allotments.
- d) were slaves who were owned collectively by the State.
- e) in antiquity were recruited not only by birth but also by continual import from outside.
- f) The slaves working in were most expensive since it involved hard labour.

15.4 SLAVERY IN ROME

The Roman society was broadly divided into the patrician and the plebeian class. At the outset of the Republic, a small patrician aristocracy owned most of the land and assumed power following the expulsion of the Etruscans. The majority of citizens were plebeian peasants, many owning small plots of land, while others worked for the big landowners as free tenant farmers. A limited amount of unfree labour also existed, though aristocratic estates were not yet large enough to require a large-scale workforce. However, as Rome expanded across central Italy between around 500 and 300 BCE, vast areas of agricultural land came under the control of the aristocracy. Much of this land, known as *ager publicus* (public land), was leased to wealthy patricians who held political authority. Consequently, the poorer free peasants were gradually pushed into debt bondage.

15.4.1 Origin of Slave Society in Rome

There were ongoing conflicts between the landed aristocracy and the poor peasants over the distribution of *ager publicus*. Over time, a few concessions were granted to the latter some portions of the public land were allotted to impoverished peasants, while others were used for establishing Roman colonies. The land distributed to the poor enabled them to generate resources necessary for military service, which was crucial to Rome's expansion. The continuity in struggle had also set a restriction over the amount of land which an individual could acquire, though it was followed by the aristocracy practically. They kept on acquiring more and more of the *ager publicus*, depriving the poor peasants their share. Taxes and dues owed to the state on these lands were seldom paid, and before long, much of the public land had effectively become the private property of the aristocracy.

With the Punic Wars began the massive expansion of the Roman Empire which gave the aristocracy great opportunity to obtain land on an unprecedented scale. Maximum benefits of the Wars went to the Senatorial oligarchy and the *assidui* farmers who were the backbone of the Roman infantry bore all the burden of fighting these Wars. Since the *assidui* had to live away from their lands for long time due to continuous Wars their lands remained uncultivated and unclaimed many times in case they died fighting. In such condition the aristocracy could claim that land. Also, in case they came back from the Wars, most of the times they had to take loans to resettle as the state took no responsibility to safeguard their property. Most of the times the *assidui* was unable to repay their debt and by the Roman law of *Nexum* were enslaved. After the abolition of *nexum* in 326 BCE, it became increasingly difficult to turn free Roman peasants into unfree labourers. Below the *assidui* class was the *proletarii*, or the propertyless class, whose main service to the state was simply to produce offspring (*proles*). As land increasingly came under aristocratic control, the number of *assidui* declined sharply, leading to a tremendous rise in the *proletarii* population. By the end of the 3rd century BCE, the *proletarii* had likely become the majority of Roman citizens and were left to confront the crisis of Hannibal's invasion largely on their own. During this period, the property qualification for *assidui* was reduced twice and eventually fell below the subsistence level required to sustain life on the land. By the late Republic, the *proletarii* secured significant concessions from the Senate, most notably free grain rations. Once their basic food needs were met, they had little incentive to leave Rome and work on the aristocrats' estates.

The abolition of *nexum*, the introduction of free grain distributions, and the heavy loss of life in wars all contributed to a decline in the internal supply of labour. According to Finley (1992), the abolition of *nexum* was one of the key preconditions for the emergence of large-scale slavery in Roman society. The aristocracy could now rely on massive numbers of enslaved workers to cultivate their vast landed estates, known as *latifundia*. Perry Anderson (1974) argues that the most decisive innovation brought about by Roman expansion was economic—the introduction of the large-scale slave *latifundium*, a development unprecedented in the ancient world. While slavery had already existed in Greece and the Eastern Mediterranean, where slaves were systematically captured, traded, and integrated into the economy, Rome took this institution to an entirely new scale. In Greece, slave-based production had long been legalized and institutionalized, suggesting that Rome, too, may have employed a limited number of slaves on its estates during the early Republic.

However, the Roman Republic was the first to combine vast agricultural estates with large-scale gang slavery in the countryside. This system was organized and managed by an urban aristocracy in Rome—unlike Greece, where smaller farms and citizen communities had remained the backbone of society. The Roman elite, already dominant in social and economic terms, used their power to create a new rural institution: the extensive slave *latifundium*. From the late 3rd century BCE onward, these enormous estates were worked by war captives brought from across the Mediterranean. Prisoners from the Punic, Macedonian, Mithridatic, and Gallic wars were transported into Italy, enriching the Roman ruling class. Between 200 and 167 BCE, roughly tenpercent or more of all free Roman adult males were permanently conscripted for military service. Such a vast army could only exist because the civilian economy was supported by slave labour, which released manpower for military

campaigns. Each new victory, in turn, supplied more slaves to work the towns and estates of Italy. Through this process, Rome fully realized the potential of the slave mode of production on a scale far beyond anything experienced in Greece.

Roman law, like that of the Greek states, recognized slaves as property. The usual term for a slave was *servus*. The concept of private property was highly developed in Roman jurisprudence and extended to human ownership. Masters possessed absolute authority over their slaves, who were treated as market commodities—bought and sold like livestock. Deprived of all legal rights and social recognition, slaves had no familial or civic identity and existed entirely at the mercy of their owners. Slave breeding was not encouraged, as it was seen as unprofitable, and the institution was sustained instead through continual acquisition of new captives. They were devoid of any kind of dignity in the society by the law. Such social and legal status of the slaves were maintained through the institutions to cope with such an extraordinarily large slave population. Despite their status as property, slaves were still human beings capable of thought, emotion, communication, and solidarity. The Roman state used coercion to keep this massive enslaved population under control. Over time, however, the perpetual reliance on force proved both socially corrosive and economically inefficient. Roman ideology further reinforced dehumanization by encouraging free citizens to feel no sympathy toward slaves, while the enslaved were humiliated so profoundly that they even forgot they were human.

To prevent unity and rebellion, slaves from the same region were deliberately dispersed across different estates and mixed with others who spoke different languages. They were denied kinship ties, prohibited from forming families, and even stripped of their original name and were assigned new ones by their masters. The only recognized relationship they had was one of complete subjugation to their owners. Slaves had no identity of their own and could not even keep their own name. They were called by the names kept by their masters. This did not mean that the slaves never tried to break free. Although there were sporadic uprisings, the most notable being the revolt led by Spartacus between 73 and 71 BCE, no other rebellion seriously threatened the Roman state. This itself reveals the unprecedented degree of control the Romans maintained over their enslaved population. Nowhere else in human history did slavery reach such an immense scale. Rome, like Greece, was not merely a society *with* slaves but a *slave society*. Finley (1992) and most Marxist historians have described the Greco-Roman world as a “slave mode of production,” meaning that while not every form of production relied on slaves, slavery remained the dominant foundation of the economy and social structure.

Check Your Progress (CYP)-II

True or False:

- a) The Roman society was broadly divided into the patrician and the plebeian class.
- b) The commonly used term for a slave was *vilicus*.
- c) *Nexum* was abolished in 426 BCE.
- d) Slaves were traded as an important commodity in Mediterranean world for several centuries.

- e) Roman law had a provision which entitled slaves to own some property, called *peculium*.

15.5 LET US SUM UP

The lesson mainly discusses the origin of slaves and slavery as an institution in the Greco-Roman world. The Greco-Roman civilization used slaves as labour force on unprecedented scale and in every sector of society and economy thus calling it as slave societies. In Greece city-state of Sparta used slaves mostly in agriculture who were known as Helots while Athens had chattel slavery. We learnt about the difference between the origin of these two types of slave system. However, war became the major supplier of slaves both men and women both in Greece and Rome. The scale of slavery in Rome was much massive as compared to Greece and treatment to slaves also differed. Manumission process in both the civilizations also differed to some extent.

15.6 GLOSSARY

Metics: Free non-citizens in Athens and Greece

Polis (plural-**Poleis**): Greek city-states

Liberty: Freedom of thoughts and expression

Chattel slavery: A form of slave system where the master owned a slave as property

Assidui: Peasants having smallholdings of land basically seen as middle class.

15.7 EXAMINATION ORIENTED QUESTIONS

Short Questions

- Q1. What do you understand by the term 'Manumission'?
- Q2. Explain the term *kleroi*.
- Q3. Analyse the condition of slaves in Sparta.
- Q4. Examine the institutionalization of slavery in Ancient Rome.
- Q5. Highlight the role of women slaves as work force in Ancient Greece.

Long Questions

- Q1. How did slavery become an important form of labour in ancient Greece? Describe regional variations in the use of slave labour.
- Q2. Account for the rise of slavery in Ancient Greece, bringing out the distinctive features of Athenian and Spartan slavery.
- Q3. Discuss the features and significance of slavery in Ancient Rome.

- Q4. Do you agree with the view that slavery was institutionalized in Ancient Greece and Rome? Give reasons.
- Q5. Was Greco-Roman society a slave society? Discuss in detail.

15.8 LESSON END EXERCISES

- Q1. Discuss the slave system in Sparta.
- Q2. Evaluate chattel slavery in Athens and Greece.
- Q3. Review the growth and institutionalization of slavery in Ancient Greece
- Q4. Discuss the salient features of slavery in Ancient Greece and Rome.
- Q5. Discuss the growth of Roman slavery in the Republic and the Principate.

15.9 ANSWER KEY

CYP-I

- Q1. See Section 15.2
- Q2. See sub-section 15.3.1
- Q3. See sub-section 15.3.2

A. Fill in the blanks:

- a) *Doeri*
- b) *Helots*
- c) *Kleroi*
- d) Chattel slaves
- e) Mines

CYP-II

True or False:

- a) True
- b) False
- c) False
- d) True
- e) True

15.10 SUGGESTED READINGS

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STATE AND EMPIRE

SEMESTER-I

COURSE NO. HIST104

UNIT-III

LESSON 16

SLAVE MODE OF PRODUCTION

STRUCTURE

- 16.0 Learning Objectives and Outcomes
- 16.1 Introduction
- 16.2 Slave Mode of Production
- 16.3 Slave Economy in Ancient Greece
 - 16.3.1 Urbanisation and Trade in Ancient Greece
- 16.4 Slave Mode of Production in the Roman Empire
 - 16.4.1 Agrarian Economy
 - 16.4.2 Trade in the Roman Empire
 - 16.4.3 Urbanization
- 16.5 Let us sum up
- 16.6 Glossary
- 16.7 Examination Oriented Questions
- 16.8 Lesson End Exercises
- 16.9 Answer Key
- 16.10 Suggested Readings

16.0 LEARNING OBJECTIVES AND OUTCOMES

Learning Objectives

The objective of this lesson is to enable you to:

- Assess how wars brought economic transition in Greco-Roman civilization.
- Understand the concept of Mode of Production.
- Learn about *Latifundias* and its role in Roman economy.
- Explain the inter-linkage between trade, agricultural production and slavery.

Learning Outcomes

After going through this lesson, you will have clear understanding of:

- The concept of Slave Mode of Production.
- The role of slaves in the agrarian economy of Ancient Greece and Rome.
- The importance of geographical location of Greece and Rome in trade and economy.
- How slaves sustained the urban culture in the Greco-Roman world.

16.1 INTRODUCTION

Dear learners, the word ‘economics’, Greek in origin, is compounded from *oikos*, a household, and the semantically complex root, *nem-*, here in its sense of ‘regulate, administer, organize’. Latin word *familia* encompassed wide spectrum of meanings: all the persons, free or unfree, under the authority of the *paterfamilias*, the head of the household; or descendants from the common ancestor; or all one’s property including personal slaves and other freedmen in service. As with the Greek *oikos*, property was the base. Slaves and slavery as an institution, depended on this idea of property, and hence slaves were a category of ‘movable property’ of their masters. Basically, ‘a slave is property, subject to the rules and procedures of property, with respect to sale, lease, theft, natural increase and so on. In the ancient civilizations-Greece in around 5th and 4th centuries BCE and Rome from about 2nd century BCE to 2nd century CE-were the period when slaves were employed in every sector of economy on massive scale along with other labour systems. The rise and decline of the classical age in Hellenic Greece and Christian Rome witnessed the emergence and crisis of the slave system.

16.2 SLAVE MODE OF PRODUCTION

There were basically six categories of dependents on one hand and free citizen on the other. They were-the slaves, serfs like *oikeus* of Crete, the *helots* (*penestae*-unfree labourers tied to the land-of Thessaly), the debt-bondsmen, the conditionally manumitted slaves, and finally the freedmen. Of these, slavery was the most flexible form, adaptable to all kinds and levels of activity, whereas helotage and the rest were best suited to agriculture, pasturage, and household services, much less so to manufacture and trade. The economy of Greece and Rome have been viewed as slave mode of production by Karl Marx and other Marxist historians. Mode of production is basically a combination of means of production (tools, technology, land and seeds, etc) and relations of production, which included the manner in which the means of production were controlled. It also included relationship between those who are a part of the production process, such as the owner and the primary producer.

It is this relation which determined how surplus was extracted by the owner from the primary producer. According to the Marxists, it is the relationship of surplus extraction, that gave its name to the mode of production. Slave mode of production is thus, a system where surplus is extracted by the slave owners through the slaves as the primary producers or a social system whose economic base depended fundamentally on slave labour. However, at a particular period in history, in the social formation, several modes of production existed, but it was the dominant mode that gave its name to the period, for example later, feudal mode of production and capital mode of production. The slave mode of production and other modes have been extensively debated by the Marxists and the non-Marxists scholars.

Xenophon's *Oikonomikos* was related to the landowner. Along with information on use of wealth, virtues and leadership qualities necessary for the householder, and so on, the longest section was covered by agronomy. (Finley, 1973). The Greco-Roman world, in fact, exhibited an unparalleled dominance of urban institutions and life over a countryside that sustained the bulk of its economic production. The slave-labour in the countryside provided free time to the landowning class who could maintain the metropolitan grandeur drawing the entire fundamental wealth from agriculture. The agrarian system of Attica provided the general pattern of Greek economy. There were large estates of around 45 to 70 acres including small holdings to about 5 acres. Nearly three-quarters of the free citizen population held rural property, but the economic foundations of society rested largely upon slave labour. Slaves not only maintained the domestic and agricultural operations of the affluent but also participated extensively in artisanal production. Free labourers outnumbered them in agriculture, and probably in crafts, yet in absolute terms the slave population was greater than that of the citizens themselves.

16.3 SLAVE ECONOMY IN ANCIENT GREECE

Greece is seen as the original homeland of the slave mode of production, since it was here that in the post-archaic period, slave labour was used on huge scale in various city-states under different names. Though it is difficult to give any exact figure but in recent estimation the ratio of slaves to free citizens during the time of Pericles in Athens was 3:2. (Anderson: 23). City-states such as Chios, Corinth etc had relatively larger number across time, while in Sparta *helots* always outnumbered the citizens. For the first time in Ancient Greece, slaves were employed outside households into other sectors of economy such as crafts, agriculture, manufacturing, mining etc. As the use of slaves became widespread and common, its nature got absolute. Now it was not one among many forms of servitude but it was a condition with complete loss of freedom, contrarily posed against the newfound concept of liberty. The slaves provided the thrust and foundation for Greek cities to rise and the citizens to develop its famous philosophies, juridical freedom and culture. The slaves in the countryside particularly provided that unparalleled freedom to the landowning class to draw its wealth from soil and invest their time and wealth in ideological discussions and living a luxurious life in the cities. The metropolitan grandeur was sustained by the slave labour.

Slaves along with being captured during wars, were also supplied through pre-existing slave trade around the Black Sea, Adriatic Sea, in the Eastern Mediterranean and North Africa along with individual centres of trade such as Athens, Chios and Corinth. The traders dealing in slaves were known as *andropodistai*. Warfare, piracy

and raids on tribal communities were the main source of this slave trade. Slaves were mainly employed in agriculture. The landed estates in Greek states were modest in size as compared to the Roman *latifundias* (large landed estates). These lands in Athens mostly produced wheat, olive and vine. The slaves worked on large estates while there were many small farms which were either worked by smaller number of slaves or by peasants themselves. Athenians always believed in self-sufficiency and personal freedom, which was reflected in their reluctance to work for others and so the labour market always remained thin and also supported large import of slaves for continuous supply of labour.

Manufacturing and domestic work were other areas where slaves were employed in considerable numbers. Athens was known for its handicrafts, particularly pottery manufacturing. Chios on the other hand was major centre for metal working and overall various other states in Attica were popular for the manufacturing of woodwork, linen and woollen clothes. Skilled slaves with professional knowledge were mostly employed in these sectors. They could earn independently as free craftsmen but had to give a part of their earning to their master as rent. Skilled slaves were also used in construction activities. Most of the public works such as walls, streets, roads, aqueducts, and sewers, merely required muscle than skill. However, records do not mention clearly about who were employed in all such works, as it could have been done by the soldiers or slaves. A large number of skilled slaves worked in metal and armament industries. It was also seen that the urban as well as rural management, barring political administration, throughout the Classical Period in Greece and Rome, was the preserve of slaves and freedmen. This was possibly because of the kind of lifestyle that men of highest status had and their inability to invest time in managing their own estates and other business affairs. The slaves in Athens were both state and privately owned. Private slaves could be bought and sold in the market and their prices were fixed according to their skill. Skilled slaves came for higher price. Large number of male and female slaves worked in household as chamber maids, wet and dry nurses, house-keepers, valets, footmen, coachmen and so on. The professional slaves as captured teacher could become a household-tutor.

Mining was another important sector where all able-bodied slaves were employed, both state-owned as well as privately owned. The slaves working in mines were most expensive since it involved hard labour. The Laurium mine, which was the richest silver mine in the southernmost tip of Attica, employed large number of slaves not only as labour force but also as managers of the slaves. Almost one-third of the total slave population in Athens worked in Laurium mines. One group of slaves worked in horrible conditions, while the other group were most expensive. The slaves engaged in breaking rocks were kept in chains and shackles and were almost exploited to extreme nearly killing them. However, those slaves engaged in smelting of silver were skilled and were treated somewhat better and also paid better.

Apart from working in these economic sectors, slaves also engaged in administrative works such as policemen, guards in prison, clerks, labourers in public constructions and maintaining sewage, and so on. The Athenian legal system excluded from its protection most of the inhabitants of the state. Slaves were responsible to their masters and women to their husbands, fathers, or other male relatives. Slaves could not lodge an accusation in law except through their masters. As in Asia, so in Athens, the aristocracy were fined, the lower beaten 50 lashes with a whip

was a standard punishment for a slave or executed. Ironically, the policemen themselves were mostly slaves.

Women, were employed as domestic labour in Greece. They engaged productively in the Greek economy. Women contributed their labour in various domestic works such as cooking, cleaning, nursing, weaving etc. in wealthy houses. It was also seen that textile production in Greece was one of the major economic sectors, done in most households in the form of workshop. Women, free or slave, worked in large numbers for spinning and weaving and contributed in the growth of textile production. Even Aristotle suggested that women were superior in some sectors of economic production while men in others.

16.3.1 Urbanisation and Trade in Ancient Greece

The privileged social stratum of the Greek urban centres, who involved themselves in political system, and attained intellectual and cultural supremacy was based on the slave labour. Urbanisation in Greek world was primarily based on this surplus labour extraction in the form of slave labour. Athenian economy and society constituted two specific features which provided it a prime position among other Hellenic city-states. Firstly, the richest silver mines at Laurium in Attica, which was worked by huge gangs of slaves. The ore from the Laurium mines financed the construction of the Athenian fleet that triumphed over the Persians at Salamis. From the outset, Athenian silver formed the economic foundation of the city's naval power. It also sustained the development of the Attic currency, which came to dominate the Greek world and circulate widely abroad as a medium of interlocal exchange, thereby contributing to Athens's commercial prosperity. Another stimulus to trade derived from the presence of a large number of *metics*, who, though barred from owning land, played a vital role in commerce and manufacture. The maritime supremacy thus, acquired by Athens found a functional correspondence in its political and social structure. The *hoplite* class of medium farmers furnished the infantry of the *polis*, while the fleet was manned chiefly by the *thetes*-the poorest citizens-who served as rowers, received monetary wages, and spent much of the year in service. In other Greek city-states, by contrast, the *hoplites* alone provided the social base of the *polis*. The condition of possibility for Athens's metropolitan splendour, in the absence of any substantial municipal industry, lay in the exploitation of slave labour in the countryside.

The citizens of Athens were largely exempted from direct taxation; ownership of land-legally restricted to citizens-carried no fiscal burden whatsoever. This immunity constituted a crucial element of peasant autonomy within the *polis*. Athenian public revenues were drawn instead from state property, indirect taxes, and the obligatory financial *liturgies* imposed upon the wealthy. These fiscal arrangements were complemented by public pay for jury service and the steady employment provided by the navy, which together ensured a notable degree of civic stability and social peace. Not only in Athens, but throughout the Graeco-Roman world, civic life remained the focal point of existence. The city was the centre of political authority and cultural achievement-philosophy, science, poetry, history, architecture, law, administration, sculpture, coinage, taxation, suffrage, and debate all reached an unprecedented level of refinement within its walls. Yet, behind this remarkable urban efflorescence lay no independent urban economy, but a fundamentally rural one. Agriculture remained, throughout antiquity, the dominant sphere of production and the principal source of wealth, sustaining even the splendour of the cities themselves. In their origins and essence, the Graeco-Roman cities were above all congregations of landowners. Outside the cities lay

the estates and farms which produced three great staples, corn, wine and oil and income derived from these supported the Greek cities. The manufacturing remained rudimentary and urban commodities were restricted to textiles, pottery, furniture and glassware. Greeks used simple technique, had limited demands and transport was exorbitantly expensive.

The coastal character of the Graeco-Roman civilization was of great importance to maritime trade. For interlocal trade linking the various regions of the Mediterranean, maritime transport was the only viable means of exchanging commodities over medium and long distances. The Aegean zone-an intricate maze of islands and harbours-thus became the earliest cradle of the city-state; Athens, for instance, built its commercial fortunes upon shipping. As Greek colonization extended eastward, the port of Alexandria emerged as Egypt's principal city and its first great maritime capital, while Rome, situated on the Tiber, evolved in later centuries into a coastal metropolis. Water, therefore, was the indispensable medium of communication and exchange, making possible a level of urban growth and sophistication far surpassing that of the rural hinterlands that sustained it. Trade in Athens was extremely extensive and directed towards the aristocratic classes, both of civilized and later farming societies. Olive oil, wine, gold, ivory, silver, metal objects, sophisticated vases, woven clothes, ornaments and slaves were major items of export and import. This trade was almost entirely carried on by sea. The commercial and manufacturing activities were mostly assisted by a highly developed banking system. Banks made loans and issued letters of credit. Banking capitals merged with manufacturing capitals and the bankers, owned factories and ships. Though private ownership of firms was widespread, government contracts too were let out to business firms with their own working force of slaves. Wages and working hours were not set by law but could be bargained between the paid workers and the employers.

Despite poor working and living conditions of the slaves, their labour provided base for Greco-Roman economy. However, this also became the reason for low technological growth as owners had no incentive for it. In the long run this brought crisis in the slave system as well, since human labour had limitations and when expansion through wars and conquests declined, the flow of slaves also declined. Therefore, it can be seen that the slave system was at the core of rise and decline of the Greek civilization. We must be cautious but that apart from slavery, there were other modes of production, though not dominant.

Check Your Progress (CYP)-I

a) On the basis of your understanding of the previous sections, answer the following questions in your own words:

Q1. Explain the terms 'slave' and 'slavery'.

Q2. Examine the concept of 'Slave Mode of Production'

Q3. Evaluate the work of skilled and unskilled slaves in Ancient Greece.

b) Multiple Choice Questions:

1. Who were called *andropodistai*?

- (a) Traders dealing with slaves
- (b) Landless peasants
- (c) Aristocracy
- (d) Chattel Slaves

2. In Thessaly slaves were known as

- (a) Helots
- (b) Chattel Slaves
- (c) Penestae
- (d) Mnoiti

3. The Laurium mine was situated in

- (a) Peloponnese
- (b) Attica
- (c) Thrace
- (d) Boeotia

4. Who wrote *Oikonomikos*?
- (a) Karl Marks
 - (b) Engle
 - (c) Perry Anderson
 - (d) Xenophone
5. All abled-bodied slaves worked in
- (a) Manufacturing
 - (b) Mines
 - (c) Household
 - (d) Construction

16.4 SLAVE MODE OF PRODUCTION IN THE ROMAN EMPIRE

In Rome too, slave mode of production in the rural area was dominant which could be ascertained from the fact that even the managers, bailiffs and supervisors were slaves appointing and managing slave gangs in the fields. The nature of Roman economy in the ancient period was primarily rural and based on slaves. Trade was another sector which contributed to the Roman economy with some industrial production. By late Republic large-scale slaves were engaged in the economy and from the first century CE, as the empire was established, new taxation system was introduced. The changes were brought in the economic roles of different classes as well. The landlords settled slaves on their estates and gave them small lands for their sustenance. The culture was based on the cities and towns where the cities extracted their wealth from the rural areas or countryside. Therefore, agriculture remained the dominant sector in the Roman economy with land being the most important source of wealth.

16.4.1 Agrarian Economy

Slaves were employed in every sector of the Roman economy. Most of the slaves were engaged in agriculture, mining and handicraft production. In fact ninety percent of the handicraft production was done by the slaves. They were also employed as clerks in government offices. There was a category of the state-owned slaves who were employed to carry out all the lowest level works. However, slaves were not a uniform category and there was a hierarchy even among them. Broadly, it was divided into two categories—skilled slaves, who were mostly employed as supervisors in the *latifundia* while some were outstanding artisans and administrative personnel; secondly, semi-skilled and unskilled slaves who were engaged mostly in agricultural production and domestic activities. Majority of the slaves however, worked on the *latifundia*. The unskilled agricultural slaves were mostly fastened in chains and formed the lowest category of slaves. The chained slaves also worked in mining under severe conditions. The slaves on *latifundia* worked in small groups under a supervisor who also was mostly a slave. The *latifundia* were divided into sections of 150-200 acres and each group of slaves were allotted one section.

The entire slave groups of the *latifundia* were placed under an overseer, called *villicus*.

The large-scale agricultural production by slave labour was the precondition of the permanent conquest and colonization of the great Roman expansion. Vast *latifundia* were created by the aristocracy in Italy, Gaul, Spain and Africa by merging their private holdings in these areas with huge estates leased from the government. Finally, within some time no difference was left between the private and the government estates and the big landowners occupied the public lands permanently. The situation emerged to such a great extent that even the emperors began possessing their own *latifundia*, for example, Augustus treated Egypt as his personal property. In Egypt a part of the land was granted to individuals while production on the royal estates was conducted by the imperial officials directly. Thus, Egypt and West Asia did not develop as slave economies and in these regions the Roman ruling class was superimposed over the original form of production and surplus extraction. Egypt was exploited ruthlessly which led to severe soil exhaustion. Later as agricultural productivity declined in Egypt it aggravated the economic problems of the Empire in the 3rd century CE.

The *latifundia* were widely distributed to prevent from any disturbances from the weather conditions. The aristocracy chose the most fertile lands of the empire. The *latifundia* had replaced most of the small holdings in Italy and the peasants were pushed to the least productive lands. Most of the small holdings were collectively organised into vast *latifundia*. Trajan's rule to invest one-third of the wealth by the senators in Italy led to more acquisitions by the oligarchy at the expense of the small peasants. Later Marcus Aurelius reduced this proportion to one-fourth. The plain of Campania in the western part of central Italy had one of the richest soils and therefore almost all the cultivable land here was converted into *latifundia*. The aristocracy pushed the small peasants into the mountainous and rocky areas of the east and occupied all the fertile lands of Campania and other regions.

The *latifundia* of Italy basically cultivated cereals and reared cattle and sheep. Pasturage in fact in some areas became their major activity instead of agriculture. Many *latifundia* of southern Italy were converted into horse-ranches. Most of the income derived by the oligarchy were from the cultivation of corn, olive and vine which had shifted to Spain and Gaul, while Egypt and Africa mostly produced wheat. The Cisalpine region of north Italy supplied mainly millet and pork. Southern Gaul gradually specialised in making good quality wines. The production of vine is long process and takes several years after plantation to give its full yield. In such situation only big landowners could afford to invest resources and promote its cultivation. The olive trees on the other hand also takes almost a generation to reach its maturity and the olives can be collected only in alternate years. Now this kind of production pattern could be managed by only the rich landowners.

Therefore, the entire urban culture and polity of the Ancient Greco-Roman world lay on the rural economy. Agriculture, throughout antiquity, remained the absolutely dominant sphere of production, invariably supplying the principal sources of wealth for the cities themselves. The towns of the Graeco-Roman world were never primarily communities of manufacturers, traders, or craftsmen; they were, in origin and essence, urban congregations of landowners. Every municipal order, from the councils of senatorial Rome downward, was fundamentally controlled by agrarian proprietors. Roman civilization thus embodied the peculiar supremacy of the town over the countryside within an overwhelmingly rural economy—a historical antithesis to the early feudal world that succeeded it.

16.4.2 Trade in the Roman Empire

As Greek commerce penetrated the East, Roman agriculture advanced across the West. In the western Mediterranean, the Romans founded towns which were often situated along the banks of navigable rivers and later became the nuclei of regional development. The emergence of a slave-based rural economy depended on the expansion of a prosperous urban network, with cities serving both as end-markets for agricultural surplus and as key centres of coordination and control. Beyond agriculture, Roman trade and industry were profoundly shaped by the pervasive presence of slave labour. As Perry Anderson (1974) observes, as many as ninety percent of the craftsmen in Rome itself were of slave origin—a fact which implies the existence of a wide network of exchange and a substantial market for surplus production. With the expansion of the Empire, the growing number of Roman cities provided both the outlets and the stimulus for commerce. By later Republic, a body of commercial law had emerged, reflecting the increasing scale and complexity of Roman trade.

The range of goods exchanged was diverse. Agricultural commodities included corn, wheat, olives, and wine which formed the mainstay of trade, complemented by non-agricultural products such as pottery, furniture, textiles, and metal and glassware. Merchants, operating under the protection of these legal frameworks, circulated such specialised goods across the Empire. The eastern trade, linking the Levant with Italy, was largely controlled by Syrian and Alexandrian traders, who facilitated the flow of luxury and staple goods to the Italian markets. The western sphere, connecting Italy with Africa and Spain, remained predominantly in Italian hands: grain was imported from Africa and Sicily, while Italian wine, metalware, and pottery were exported in exchange for silver from the Spanish mines and for slaves. During the time of Augustus Caesar, the network of roads and waterways were developed. He also encouraged manufacturing centres to increase production to be traded in wider markets.

The precondition of trade in the Greco-Roman world was its coastal character. They were quintessentially Mediterranean, in its inmost structure. Interlocal trade in the ancient world could proceed only by water since maritime transport was the sole viable means of exchanging commodities over medium and long distances. The immense importance of the sea for trade is illustrated by the fact that, in the time of Diocletian, it was cheaper to ship wheat from Syria to Spain, across the entire breadth of the Mediterranean rather than to haul it by road for a mere seventy-five miles. Owing to this geographical and economic convenience, the Aegean zone, with its labyrinth of islands, harbours, and promontories, became the earliest cradle of the city-state and Athens, for instance, owed its commercial fortunes to shipping. Later, the port of Alexandria rose as Egypt's first great maritime capital during the Hellenic period, while Rome, situated upstream on the Tiber, evolved into a coastal metropolis. Water was the indispensable medium of communication and exchange, making possible an urban concentration and sophistication far surpassing that of the rural interiors that sustained it. The interaction between town and country thus formed the foundation of trade in the classical world, a system made viable only by the Mediterranean Sea at its centre.

Yet, despite the breadth of this exchange network, the techniques of production remained simple, demand limited, and transport costs high. Many economic historians have therefore concluded that these structural constraints discouraged significant capital investment. This interpretation, however, has not gone unchallenged. Keith Hopkins

(1980) argued for a notable expansion of trade, at least during the Principate, on several grounds: first, the imposition of monetary taxation in the provinces increased the circulation of goods; second, the growing number of shipwrecks suggests a higher volume of maritime traffic; and third, the general level of consumption in the western provinces appears to have risen, sustaining effective demand. Hopkins further noted that, although senators were officially barred by the law of 218 BCE from owning large ships-profit-making being considered unworthy of their rank-by the late Republic this restriction had largely fallen into disuse. Senators increasingly participated in commerce and loan finance, directly or through intermediaries, as banking and credit assumed greater prominence. By contrast, scholars such as P. Garnsey and R. Saller (1987) have maintained that, despite peace and administrative stability under the Principate, economic growth remained moderate. They emphasized the predominance of agricultural labour, the persistence of low technology, and the continuing centrality of land as the principal source of both wealth and power as conditions that imposed clear limits on commercial expansion.

Slavery, meanwhile, constituted the most extreme form of urban commercialization of labour. Slaves were assembled, allocated, and dispatched from city markets, and many were also employed within them. In this way, slavery became the economic hinge linking town and countryside, to the disproportionate profit of the city. It sustained the captive agriculture that produced the surplus on which urban wealth depended, while simultaneously fostering the inter-city trade that complemented it across the Mediterranean. Slaves were, moreover, an eminently movable commodity in an economy constrained by transport difficulties. They could be transferred across regions with relative ease, trained in diverse skills, and, when abundant, kept the cost of free labour low by serving as a ready substitute. The prosperity and comfort of the propertied urban classes of the Graeco-Roman world rested upon the vast surplus extracted through this system of labour, whose influence extended to every sphere of economic life. Yet, in the end, the slave relations of production imposed insurmountable limits upon the ancient forces of production, tending ultimately to paralyse productivity in both agriculture and industry. As Perry Anderson (1974) suggests that similar socio-economic condition, both in Greece and Rome laid the foundation for slavery as mode of production.

16.4.3 Urbanisation

P. Garnsey and R. Saller (1987) have observed that in the western provinces, urbanisation constituted a central element in the process of Romanisation-a development shaped both by deliberate governmental policy and by local initiative. The establishment of large *latifundia* and the general settlement of the aristocracy in the countryside encouraged the formation of rural markets (*foras*), which served as centres of exchange for goods and ideas alike. These, in turn, stimulated the broader growth of urban life in the western Mediterranean and in Italy in particular. While sustaining the agrarian economy, the Roman emperors were also great builders, promoting monumental urbanisation as a visible expression of imperial order and authority. As Roman expansion proceeded, the populations of conquered territories were gradually assimilated into the imperial framework, extending citizenships, institutions, and urban forms across the Mediterranean world.

Perry Anderson (1974) has argued that the rise of Rome inaugurated a new cycle of urban-imperial expansion. This transformation represented not merely a geographical shift that placed Italy at the centre of the ancient

world, but also a profound socio-economic development where a mode of production whose scale and durability far surpassed that of the Greek city-states. The early growth of the Roman Republic followed the characteristic trajectory of classical urbanism such as local wars with neighbouring cities, the conquest of land, the subjugation of allied communities, and the founding of colonies that carried Roman institutions and agrarian structures outward across the peninsula.

Historians unanimously agree that slaves were present in large numbers in the ancient Greco-Roman world, more so in Rome. Nevertheless, there are some differences of opinion over the precise role of slavery in the production process. While the non-Marxist scholars believed that the role of slavery in Greco-Roman society has been exaggerated and that the slaves were not prime in the economy. They argued that the number of slaves were too less as compared to the peasants and free labour and that slaves were just one category of labour. But within the non-Marxist scholars too there are difference of opinion on it. The leading non-Marxist historian, Finley (1992), who is also an authority on this subject, strongly suggests that the Greco-Roman society was a slave society. The Marxist scholars, on the other hand attach great significance to slave labour in the context of the Greco-Roman economy. Slavery was a decisive invention of the Greco-Roman social formation in the opinion of Karl Marx himself. Marx and Engels wrote extensively on various aspects of ancient Greece and Rome though not on slavery but their understanding and framework on it provided a platform for further study. In recent times the British historian Geoffrey de Ste. Croix has written a monumental book titled *The Class Struggle in the Ancient Greek World* (1981) which covers slavery in Greece extensively but is not confined to Greece only and contains an exhaustive discussion on Roman slavery as well.

Check Your Progress (CYP)-II

On the basis of your understanding of the previous sections, answer the following questions in your own words:

Q1. Discuss various categories of slaves present in Ancient Rome.

Q2. Explain the term '*latifundia*' and its importance in agrarian economy.

Q3. Evaluate the views of Marxist and non-Marxist scholars on slavery in Greco-Roman society.

16.4 LET US SUM UP

The main focus of this lesson is on the economic aspect of Greco-Roman civilization. Both the civilizations heavily depended on slaves as their work force, making it a dominant mode of production. The slaves formed the backbone of economy employed in every sector such as agriculture, manufacturing, mining, household, construction, lower administrative positions and so on. The slaves were sold and bought which was controlled through legal institutions in both Ancient Greece and Rome. The presence of slaves on an unprecedented scale in both civilizations has led the scholars to suggest these as the slave societies. It was the existence of large slave labour force both skilled and unskilled who were involved in the construction of towns and cities with amenities in the Greco-Roman urban life.

16.5 GLOSSARY

Familia: The term refers to family including all members free and unfree

Near East: The present West Asian region with countries such as Syria, Jordan, Iraq, Iran etc. was known as Near East in Ancient period

Andropodistai: The traders involved in slave trade

Hoplites: Middle-class farmers fighting as soldiers in ancient Greece

Villicus: The overseer under whom the entire slave groups were placed in a latifundia

Liturgies: In Athens rich citizens performed some duties voluntarily towards public office

16.6 EXAMINATION ORIENTED QUESTIONS

Short Questions

- Q1. Expand on different terms of slave.
- Q2. Describe trade in Ancient Greece.
- Q3. Analyse the relationship between slave and master.
- Q4. Discuss on the slaves in mining sector.

Long Questions

- Q1. Examine the role of slavery in ancient Greco-Roman economy.
- Q2. Roman trade and industry were affected extensively by the presence of a large slave labour force. Elaborate.
- Q3. Evaluate the importance of slaves in Greco-Roman agrarian economy.
- Q4. Was slavery instrumental in the making of the Ancient Greece and Roman economy? Discuss.
- Q5. Slavery played a vital role in the Ancient Greco-Roman economy. Elaborate.

16.7 LESSON END EXERCISES

- Q1. Did democracy and slavery grow simultaneously in Athens?
- Q2. Discuss the process of urbanisation and trade in the Ancient Greek city-states.
- Q3. Examine the role of slavery in ancient Greek economy.
- Q5. Trace the role of slaves in sustaining the agrarian economy in Roman empire.

16.8 ANSWER KEY

CYP-I

1. See Section 16.1
2. See Section 16.2
3. See sub-section 16.3

B. Multiple Choice Questions:

1. (c) 2. (a) 3. (c) 4. (d) 5. (b)

CYP-II

Answer the Questions:

1. See sub sections 16.4.1
2. See sub sections 16.4.1
3. See sub sections 16.4.3

16.9 SUGGESTED READINGS

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STATE AND EMPIRE

SEMESTER-I

COURSE NO. HIST104

UNIT-III

LESSON 17

DECLINE OF SLAVERY

STRUCTURE

17.0 Learning Objectives and Outcomes

17.1 Introduction

17.2 Factors of Decline in Slavery

17.2.1 Manumission

17.2.2 Slave and Manpower Crisis

17.2.3 Social and Economic Crisis

17.3 Let us sum up

17.4 Glossary

17.5 Examination Oriented Questions

17.6 Lesson End Exercises

17.7 Answer Key

17.8 Suggested Readings

17.0 LEARNING OBJECTIVES AND OUTCOMES

Learning Objectives

The objective of this lesson is to enable you to:

- Explain about Manumission process and the system of *Peculium*.
- Analyse economic factors of decline in slavery in the Greco-Roman civilizations.
- Understand the emergence of the *Colonnate* system.
- Critically analyse the different views on Decline in Slavery.

Learning Outcomes

After going through this lesson, you will have a clear understanding of:

- Difference between Manumission in Ancient Greece and Rome.
- System of *Patrocinium* and its role in managing manpower shortage.
- Rise of *coloni* with the decline of slave mode of production.
- Debates around decline in slavery.

17.1 INTRODUCTION

Dear learners, the Greco-Roman expansion created vast slave base for originating slave mode of production. The slavery was more pronounced and on huge scale in Rome in comparison to Greece due to its sheer expanse. When peace was established during Principate and Roman empire the slaves sustained the economy. But this peace also led to the crisis in slave-based production since wars reduced and so did the prisoners of war. After the death of Trajan in AD 117, no war was waged hence no new land was added. Minor skirmishes with tribal groups settled around borders helped slave traders to capture some slaves to fill the void. But this did not solve the problem of rapidly falling number of slaves. Also, these raids continued only till the empire was militarily strong. The trend of slave crisis could be seen in first century of the Principate but it became a serious issue after the death Trajan. As the tribal threats increased on the border, it became difficult for the empire to engage army in these raiding expeditions to capture slaves. In Greece, with the decline of the city-states due to internal strife, gradual socio-economic reforms and Macedonian invasion in the 4th century BCE, crisis emerged in the slave mode of production. The decline in slavery not only impacted the Greco-Roman economy but also their polity, society and culture.

17.2 FACTORS OF DECLINE IN SLAVERY

In the Greco-Roman civilization, slavery was the backbone of economy and when its supply began to decline the economy also began to face crisis. The crisis initiated political decline and invasions leading to decline in the Empire.

17.2.1 Manumission

Slaves in the Greco-Roman empire existed in an inhuman condition with no rights, however, in the later phase of the Roman empire some changes were introduced in the urban areas which also extended to the rural areas as well. Roman law incorporated a distinctive provision that permitted slaves to possess a form of property known as *peculium*. With the consent of their masters, slaves were allowed to reserve a portion of their produce or earnings as *peculium*, the extent of which was determined by the owner. This property was legally recognized and could be employed by slaves to undertake independent economic enterprises such as trade, moneylending, and production. In certain instances, slaves could even acquire ownership of other slaves. The profits derived from these activities were typically shared between the master and the slave as the former received a stipulated

portion, while the remainder was added to the slave's *peculium*. Consequently, the *peculium* functioned as an economic incentive, encouraging slaves to exhibit initiative and engage in productive and entrepreneurial pursuits within the constraints of servitude. It also reflected the complex and evolving nature of the Roman slavery, where legal subjugation coexisted with limited economic autonomy. The gains derived from these activities were enjoyed by their masters. In this way the skill of the slaves who were better trained were utilised effectively. The amount saved under the *peculium* also helped slaves to gain their freedom or manumission.

Manumission was the process through which the slaves were released from the bondage of slavery in the Greco-Roman empire. There were legal rules that had to be followed by the owner and slave both. The manumission of slaves in Rome was far greater in comparison to Greece. Also, manumission tax was levied by the Roman empire. Manumission in Greece could be complete or partial. It was master who decided the nature of manumission. In complete manumission the manumitted slave got all legal rights and protection from re-enslavement while in partial one was bound by some obligations to the master. In Greece, even after getting manumitted, slaves were not conferred citizenship and had to live as an outsider or *metics*. S/he however, could earn freely and hold high positions except for few political positions. In Rome, a manumitted slave was known as freedman and acquired Roman citizenship. Freedom could also be attained by joining a monastery with the permission of master. Manumission, certainly was an act of generosity in a condition where slaves were seen as commodity and exploited mentally and physically to extreme. It was also a show of power and wealth by the masters in some cases. Roman slaves joined the lowest social class after freedom and could rise to high positions in administration as well. They could supervise, collect tax, assist emperors by keeping eye on senators, become agents for businessmen, and so on. However, despite getting freed and amassing wealth and prominence, slaves had to bear the brunt for their previous status as they were mostly looked down upon by the upper-class people.

Since manumission was done through a legal process, both the slave and master were bound by it. A freedman was always legally attached to his/her previous master who acted as the mentor and patron. Even after freedom slaves had to obey and provide general service to their ex-master and could be legally punished if disobeyed. Rules also restricted freedmen from joining the military ranks, become senators, or forming any union with upper class.

17.2.2 Slave and Manpower Crisis

Roman civilization was based on cities, and the cities existed largely by the virtue of an agricultural surplus produced by the slaves. Slaves were worked so hard that they did not normally reproduce to fill their own ranks. During the first hundred years of the Principate an overall trend of decline in the supply of slaves could be seen. In the post-Trajan phase, the problem became even starker. The demand for the slaves was fed by the large-scale wars in which they were captured in vast numbers. Raiding the tribal settlements and the neighbouring territories helped supplement the supplies of slaves. The viability of the *peculium* and the broader slave mode of production in Rome was sustained only as long as the Empire remained militarily dominant. The steady supply of slaves was integral to the functioning of the Roman economy which depended fundamentally on continuous territorial expansion and conquest. Once imperial expansion halted, the influx of captives declined sharply,

precipitating a labour shortage. The slave mode of production, intrinsically tied to the political and military apparatus of the Empire, thus began to disintegrate as Rome's external conquests waned. By the post-Trajan period, military campaigns had largely ceased, and by the second century CE, the Empire was struggling to defend its frontiers against tribal incursions. Under such conditions, the army could no longer sustain the raiding expeditions that had traditionally supplied the slave markets.

This decline in the availability of slave labour brought to the fore deep structural weaknesses within the Roman economy. The agricultural sector, which had long relied on the abundance of cheap slave labour, exhibited severe technological stagnation. The prevalence of coerced labour discouraged innovation, as landlords saw little incentive to adopt labour-saving techniques. Consequently, as the supply of slaves dwindled, slave owners were compelled to experiment with alternative arrangements to maintain production. One such adaptation was slave breeding, a makeshift attempt to resolve the labour crisis by encouraging reproductive self-sufficiency within the slave population. Masters began to permit, and even promote, the formation of loose familial bonds among male and female slaves, a practice previously discouraged. Yet, this strategy faced practical and demographic limitations: human reproduction could not match the pace or volume of military enslavement, and the gender ratio of slaves, especially on large *latifundia*, was often uneven due to the predominance of female slaves in domestic labour. As some slave families began to reproduce and establish kinship ties, they gradually ceased to be viewed merely as replaceable property. In response, many landowners reorganised production by settling such families on small plots within their estates, to be cultivated with family labour. These attached slave households paid a portion of their produce as rent or dues to the master. This shift marked a significant transformation in the internal structure of the Roman agrarian relations seen as an early movement toward the *colonate* system that would later characterise late antiquity. While it marginally improved the condition of the slaves, it also signified the erosion of the classical slave economy.

Faced with chronic labour shortages, many landowners began to settle groups of slaves on small plots within their estates, allowing them to cultivate the land with their families and remit a fixed portion of the produce to the master. This practice blurred the distinction between slavery and tenancy. Over time, these attached slave families acquired a semi-hereditary relationship to the land they worked, and their obligations became more regularised in kind and quantity. The landlord, in turn, ceased to organise direct production and instead extracted surplus through rents and dues. This shift represented not only a pragmatic response to economic necessity but also a structural transformation in the mode of exploitation—from the direct domination of slaves to the indirect control of dependent cultivators.

Simultaneously, the institution of manumission accelerated the erosion of the slave system. The frequency with which Roman masters freed their slaves, often for fiscal, administrative, or moral reasons, it created a growing class of *liberti* who occupied an ambiguous status between freedom and servitude. Though legally free, they remained bound by patronal obligations and often continued to serve their former masters. Manumission was particularly widespread in urban settings, where freedmen could participate in commerce and crafts, thereby contributing to the diversification of the late Roman economy. Yet, in rural areas, the labour shortage forced large

estate owners to transform their former slaves into dependent tenants rather than release them outright. These emerging relationships of dependency that were hereditary, localized, and mediated through obligations to the land, formed the embryonic basis of serfdom.

By late antiquity, particularly from the third century CE onward, this process had crystallised into the *colonate* system, wherein *coloni* were legally tied to the soil they cultivated and were required to provide fixed rents or labour services to the landowner. Though not slaves in the juridical sense, *coloni* lacked personal freedom of movement and were bound to the estates as hereditary labourers. This institution marked the transitional phase between the classical slave economy and the feudal relations that would dominate medieval Europe. The transformation reflected both economic pragmatism and the adaptation of social relations to a new mode of surplus extraction in a context of declining urban life, shrinking trade networks, and the localisation of power.

Thus, the disintegration of the Roman slave system did not signify the emancipation of labour but its reconfiguration. The coercive foundation of production persisted, though in a modified form. The relationship between master and slave evolved into that between lord and serf, anchored now not in personal ownership but in the control of land and the hereditary obligations of those who worked it. In this long transition, spanning the late Roman Empire to the early medieval period, Europe witnessed the transformation of its economic base and social order, paving the way for the emergence of feudalism.

Marxist historians opined that the freedom won by the slaves led to the decline in the 'rate of exploitation' and finally in the slave mode of production itself by about 3rd century CE. This situation somehow did not mean that the slave labour ended and got replaced by another form of labour extraction. But it was true that by the 3rd century CE, there was a severe crisis in the slave labour and the landowners began looking for an alternative source of surplus labour. The alternate methods were found in the system of *colonate* (tenant farming system) and the *patrocinium*.

17.2.3 Social and Economic Crisis

The landowners from the 2nd century CE onwards had begun to reduce the status of the free cultivators known as *coloni*. The *coloni* were the free tenant farmers who did not own the land which they cultivated. It included the slaves who were given individual plots by the landlords to settle with their families and whose conditions had improved. There was hardly any difference between such slaves and the *coloni*. It was also seen that the original *coloni* and the slaves with improved status as they became tenant farmers, and the depressed peasants became part of the larger *coloni* status by the late Roman empire. The *coloni* possessed limited means of subsistence and were largely dependent on their landlords for essential agricultural inputs such as tools, draught animals, and seeds. Functionally, they operated as sharecroppers, cultivating plots of land in exchange for a share of the produce. The portion appropriated by the landlord represented both rent for the use of the land and repayment for the implements and seed provided. Although the *coloni* typically retained about half of their produce, their economic dependence was profound. Over time, their nominal status as free tenants eroded, as they became increasingly bound to the estates they worked. The illusion of freedom gradually gave way to a condition of de facto servitude, wherein mobility and autonomy were severely restricted.

This dependence was eventually codified into law. Emperor Diocletian, in his fiscal reforms of the late third century CE, formally prohibited cultivators from leaving the lands on which they were registered for taxation purposes. This measure sought to stabilize agricultural production and secure a predictable tax base amid the empire's economic and administrative crises. Under Constantine, these restrictions were further institutionalized: legal provisions explicitly bound the *coloni* to the soil, stipulating that they were to be transferred along with the land in the event of its sale or inheritance. Such legislation effectively transformed the *coloni* into hereditary tenants whose status was transmitted through generations. Thus, what began as an economic adaptation to labour scarcity culminated in a legal and social transformation. The *colonus* ceased to be a free tenant and became a precursor to the medieval serf—personally unfree, yet distinct from the slave in that his subjection was now mediated through the land itself rather than through outright ownership. This evolution marked a decisive moment in the long transition from the slave-based economy of classical antiquity to the feudal order of medieval Europe, where economic exploitation was rooted in territorial lordship and hereditary dependency. The importance of this new *coloni*-based production system can be assessed from the fact that, the landlords willingly paid higher price than the market to keep a *colonus* away from getting inducted into the army.

The landed aristocracy now extracted huge surplus from the *coloni* since the surplus extraction had declined from the slave-based production earlier. Thus, *colonate*, or the *coloni*-based production became more widespread in the earlier parts of Greco-Roman civilization by the 4th century CE. With the crisis of the slave mode of production, the *latifundia* system—once the cornerstone of Roman agrarian wealth—also began to decline. In its place emerged the *colonate*, which has been widely interpreted as the transitional stage between the classical Greco-Roman slave economy and the medieval European feudal order. The *colonate* reflected a fundamental transformation in social and economic relations: labour was no longer organized through direct coercion and ownership of persons, but through hereditary dependency and attachment to the land. The *coloni*, bound to the estates of their landlords, represented the crystallization of this new form of servile tenancy that bridged the worlds of antiquity and feudalism.

Alongside the *colonate*, another institutional mechanism—*patrocinium*—developed as an alternative response to the Empire's labour and administrative crises. *Patrocinium* referred to the system of protection offered by powerful landowners or local military commanders to small peasants and cultivators who voluntarily submitted themselves to their authority. In exchange for the patron's protection—often sought to escape the exploitation of corrupt imperial officials or the crushing burden of taxation under the Dominate (284–641 CE)—peasants surrendered both their freedom and ownership of their land. The land was then returned to them as a tenancy, effectively converting freeholders into dependent tenants. Though this relationship initially rested on personal allegiance, in practice it bound peasants permanently to the estates of the nobles, mirroring the condition of the *coloni*.

Over time, *patrocinium* spread across vast regions of Italy, Spain, and Gaul, where the landed aristocracy consolidated control over the countryside. This process severely undermined the fiscal and administrative foundations of the Roman state, depriving it of revenues and weakening its capacity to enforce authority in the

western provinces. As imperial institutions decayed, local aristocrats became the effective centers of power, exercising both economic and judicial control over their dependent populations. Through these converging developments—the rise of the *colonate*, the spread of *patrocinium*, and the disintegration of centralized imperial governance—a uniform class of dependent peasant tenants bound to the soil emerged across much of the western Roman Empire by the third century CE.

This transformation signified more than an economic adaptation; it marked a profound reconfiguration of social order. The ties of dependence, protection, and land tenure that developed under late Roman conditions laid the institutional groundwork for the feudal system of medieval Europe. In this way, the decline of slavery did not lead to social emancipation but rather to the reorganization of servitude in a new form—anchored in the land, sanctioned by custom and law, and perpetuated by the rise of local aristocratic power.

A critical turning point in the Roman economy occurred during the first two centuries of the Principate, when the price of slaves rose sharply due to a significant reduction in supply. The cessation of large-scale conquests curtailed the influx of war captives, transforming slaves—once an abundant and inexpensive commodity—into a scarce and costly form of labour. By the second century CE, as A. H. M. Jones (1956) observed, the price of slaves had increased nearly eight to ten times compared to the rates prevailing in the late Republic (2nd–1st centuries BCE). This escalation reflected not only the dwindling supply but also a broader decline in the profitability of slave-based production. By the third century CE, the trend had reversed: slave prices fell, indicating a contraction in demand as the system itself entered a phase of structural decay.

Compounding these economic pressures was a severe demographic crisis. Two major outbreaks of plague—in 165 CE and again in 250 CE—caused widespread depopulation across the Empire, drastically reducing the available labour force. The resulting scarcity of manpower, both free and servile, intensified the crisis of the agrarian economy. In response, the landed aristocracy was compelled to experiment with new mechanisms of surplus extraction, giving rise to transitional labour systems such as the *colonate* and *patrocinium*. These arrangements reflected the adaptive strategies of the ruling class as they sought to preserve their economic dominance under conditions of demographic decline, fiscal instability, and the gradual disintegration of the slave mode of production.

Landowners stopped funding the maintenance of slaves and instead began to dole out small plots to them for support and began to extract surplus produce from that. The huge lands now got divided into small farms still worked by the slaves and their families and tenant farmers. The productivity increased marginally but output remained stagnant due to decrease in the total labour force. The free tenants and small-landholders who had always worked alongside the slaves got trapped under the ‘patronage’ of landed aristocracy in order to protect themselves from the State’s forceful exactions. This turned their economic position similar to ex-slaves. According to Geoffrey Ste Croix (1981), by 2nd century CE it was no longer profitable to invest in slaves. On this situation, Perry Anderson (1974) also opined that the sharp rise in the price of slaves increasingly exposed the contradictions and risks with slave labour for the owner. As for the slave owner, according to Anderson, each adult slave was a part of a perishable capital investment that ended with the death of the slave. M. I. Finley (1980), on the contrary,

opined that the increasing prices of the slaves did not automatically lead to a decrease in their supply. However, he agrees that in the later part of the Roman empire, 'the employers of labour were not successful in maintaining a sufficient complement of slave labour'.

It is however to be kept in mind that the slavery did not disappear completely from the late Roman empire and latifundias too continued to exist in some parts of the Empire. The role of slaves declined in urban crafts but they continued to provide their intensive labour in households, mines and lowest positions of the State. Also, in the regions of Spain, Italy and Gaul, they still remained vital for cultivation on the latifundias of the provincial landlords. The presence of slaves on agricultural field, in service sector and the State run slave industries, still ensured lack of incentive towards invention and technological advancement. Poor technological development that lagged behind during the Principate, continued even when the slave mode of production was disintegrating. Even while slaves were being converted to *coloni*, technology did not improve. The production still depended on physical labour and remained labour intensive. Roman empire faced severe and more general economic crisis with the decline in the slave mode of production.

By 4th century CE, the Roman empire was divided into Western and Eastern Roman empire. The Eastern part was more flourishing and richer with balanced trade and bustling urban centres. Medium and small farmers and the middle class had strong presence and hold in the economy and the society was never dependent on the slave-labour as extensively as the West. Therefore, crisis in the slave mode of production did not make much impact on the society and economy of the East as compared to the West. The landed aristocracy in the West now shifted to the rural area and the *coloni* lived under a semi-independent status under them. Spain, Gaul and Italy were the regions where this kind of arrangement mostly existed. As the landowners in the West moved to countryside the centre weakened and finally collapsed. The eastern region later helped restructure the economy during the Dominate period, since resources could be mobilised from the East. The Roman emperor now shifted to the East and founded a centralised state since the landed aristocracy was not so powerful to interfere in this process.

The shift of the West towards the rural economy was smooth since towns and cities were fewer in number as compared to the East. This is very evident from the fact that the three largest trading and urban centres of the Roman empire were Alexandria, Rome and Antioch of which Alexandria and Antioch were in the East. Alexandria in Egypt particularly was the greatest and economically the most important port in the entire Greco-Roman empire. Even after Rome lost its economic importance, these two port cities continued to prosper for long. Later in the 4th century CE, the city of Constantinople was added as trio in the East which continued to flourish economically. The economic crisis therefore was starker in the regions of Spain, Italy and Gaul, the centre of the Roman empire and where slave mode of production was the most pronounced. The western Roman empire finally collapsed under continued Germanic attacks while the Eastern empire survived for long.

The economic problems of Rome aggravated due to manpower shortages. After Trajan, as foreign conquests ended and slavery declined, there was a greater need for people to stay on the farm. But at the same time the barbarians were constantly attacking the Empire which steadily needed men to serve in the army. During 2nd and 3rd centuries CE the plague sharply reduced the population. Scholars have estimated that between Marcus

Aurelius and restoration of the Empire in 284 CE, the population of the Roman empire had nearly reduced by one third. As a result, there were neither enough hands to work on fields nor enough men to fight the enemies. Consequently, Romans began to lose wars which they hardly did earlier.

Check Your Progress (CYP)-I

A) On the basis of your understanding of the previous sections, answer the following questions in your own words:

1. Examine the concept of *Peculium*.

2. What do you understand by slave-breeding?

3. Define *coloni*.

B) True or False:

- a) The amount saved under the *peculium* helped the slaves to gain their freedom or manumission.
- b) Manumission was the process through which people got enslaved in the Greco-Roman empire.
- c) A tax was levied on manumission by the State.
- d) The *coloni* were the free tenant farmers who did not own the land which they cultivated.
- e) Slavery disappeared completely from the late Roman empire

17.3 LET US SUM UP

The lesson discusses the issues related to the decline of slavery in the Greco-Roman empire. In Greece, the slave mode of production faced crisis with the Macedonian invasion, as the city-states declined. In Rome, the scale of slavery was much more pronounced in comparison to Greece. Also, since the Roman empire was vast and remained in power for longer period, the lesson focuses more on the crisis of slavery in the West. Manumission process and ceasing of the Wars is seen as some of the most important reasons behind manpower crisis and crumbling of the slave mode of production. Crisis in the slave-labour gave way to *Colonate* system and *Patrocinium* by the late Roman empire. It was the *coloni* who replaced the slaves in the heart of Roman empire- Italy, Spain and Gaul. However, scholars opine that the slave-labour did not disappear completely and continued in some form or other in households and agriculture sectors of the economy in the West. The East, however was less affected by this slave or manpower crisis since slavery was not as prominent and local peasants and middle class kept the trade and economy going. Later the Roman empire got divided into East and West and the prime centres of Empire in the West withered away under Germanic attack while the Eastern empire continued for long. The decline in the slave mode of production channelised new socio-economic, political and cultural systems in the West.

17.4 GLOSSARY

Manumission: The process of setting a slave free

Coloni: Tenant-farmers who paid part of their produce in cash or kind to their landlords and were tied to his estate.

Freedman: Slaves freed from their bondage and received citizenship.

Peculium: Small sum of money allowed to earn by the slaves with which they could buy their own freedom.

Slave-breeding: The process where slaves were allowed to marry and reproduce which was not acceptable in the beginning of slavery system.

Patrocinium: Protection provided by the nobles and landlords to peasants and those who submitted voluntarily.

17.5 EXAMINATION ORIENTED QUESTIONS

Long Questions

- Q1. Examine the reasons which led to a slave crisis in the Roman economy.
- Q2. What role did the *colonate* system play in the decline of slave mode of production?
- Q3. Define Manumission. What impact did it make on the crisis in slavery.
- Q4. Critically analyse the role of landed aristocracy in the changing socio-economic conditions in late empire.

17.6 LESSON END EXERCISES

- Q1. Analyse the impact of price-rise on decline in slavery.
- Q2. Write a short note on *coloni*.
- Q3. Explain the concept of *Patrocinium*.
- Q4. What caused slight improvement in the condition of slaves in late Roman empire?

17.7 ANSWER KEY

CYP-I

Answer your questions:

1. See sub-section 17.2.1
2. See sub-section 17.2.2
3. See sub-section 17.2.3

True or False:

- a) True
- b) False
- c) True
- d) True
- e) False

17.8 SUGGESTED READINGS

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RELIGIOUS DEVELOPMENT

SEMESTER-I

COURSE NO. HIST104

UNIT-IV

LESSON 18

ZOROASTRIANISM

STRUCTURE

- 18.0 Learning Objectives and Outcomes**
- 18.1 Introduction**
- 18.2 Zoroastrianism: Understanding the Religion**
 - 18.2.1 Zoroaster**
 - 18.2.2 Zoroastrianism**
 - 18.2.3 The Important Religious Aspects**
 - 18.2.4 The Important Religious Ceremonies**
- 18.3 Zoroastrianism: Philosophy**
 - 18.3.1 The God**
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 - 18.3.3 Concept of the World and Place of Man**
 - 18.3.4 Concept of Liberation**
- 18.4 Let us sum up**
- 18.5 Glossary**
- 18.6 Examination Oriented Questions**
- 18.7 Lesson End Exercises**
- 18.8 Answer Key**
- 18.9 Suggested Readings**

18.0 LEARNING OBJECTIVES AND OUTCOMES

Learning Objectives

The objective of this lesson is to enable you to:

- explain the philosophical and religious aspects of Zoroastrianism.
- evaluate the major religious ceremonies and different forms of worship.
- examine the priesthood, its prominent deities of Zoroastrianism.
- identify the significance of the sacred fire in Zoroastrianism.

Learning Outcomes

After going through the lesson, you will have a clear understanding about:

- the origin and developmental journey of Zoroastrianism.
- the Zoroastrianism as a religion.
- the important religious characteristics of Zoroastrianism.
- the God, concept of world and liberation of Zoroastrianism.

18.1 INTRODUCTION

Dear learners, Zoroastrianism often attributed to the prophet Zarathustra, is one of the world's oldest known monotheistic religions. Zoroastrianism's evolution within the eastern Iranian cultural sphere, while part of a broader Indo-Iranian moment, was accompanied by a marked theological and ethical innovation that would have a great influence on the religious history of West and Central Asia.

The Zoroastrian doctrine proclaims the devotion of Ahura Mazda, a supreme, wise lord and creator, who stands for truth, order, and righteousness. The core idea of its theology is ethical dualism: the cosmic struggle between Spenta Mainyu (the beneficent spirit) and Angra Mainyu (Ahriman), the destructive spirit. Zoroastrianism is moral rather than absolute dualistic. Zoroastrianism acknowledges that it is possible for each human being to preserve truth over falsehood (Druj) through good thoughts, good words and good deeds.

The Avesta, especially the Gathas, hymns thought to have been composed by Zarathustra himself, is the main sacred text of Zoroastrianism. The texts shed light on early Iranian society, its religious reform and theological ideas. Under the Achaemenid Empire, Zoroastrianism became the state religion and stayed on as the imperial ideology during the Parthian and especially the Sassanian Empire where it became institutionalised.

Zoroastrianism rituals promote purities in the sacred fire and elaborate funerary practices with dakhmas (Towers of Silence) in which the dead are exposed to the sky in order to not pollute. Fire temples where worship takes place and the fire is treated as divine light and divine wisdom was used here.

18.2 ZOROASTRIANISM: UNDERSTANDING THE RELIGION

This religion was originated in the ancient Persia by the prophet Zoroaster. The religion emphasizes on only one god – Ahura Mazda, which means the Wise Lord, Light and Truth. Its simple approach to morality preaches followers to act according to the – “Good Thoughts, Good Words, Good Deeds.” The concept of punishment for wrongdoings and rewards for good action helps to develop a sense of accountability among the followers.

18.2.1 Zoroaster

The term ‘Zoroaster’ is considered to have a combination of two words ‘zarath’ or ‘zaradh’ i.e. ‘old’ and ‘ushtra’ i.e. ‘camel’. Therefore, the word ‘Zoroaster’ identifies the ‘old camel keeper’. The Zoroaster is traced in the lineage of Feridun, Persia king of Peshadian dynasty. He was a great-grandson of the fifth descent of Spitama i.e. Haechataspa. In the Avesta, it is called – “Spitama Zarathushtra” means Zoroaster of the family of ‘Spitama’.

We do not have clear cut information about date of birth of the Zoroaster as different scholars have different opinion. There are six scholars who describe Zoroaster at different time. The first one described him as Chaldean or Assyrian whereas the second scholar sees him as a Bactrian. According to another one Zoroaster was a Pamphylian and the fourth philosopher considers him as an Armenian. The fifth and sixth one identified him as a Median and a Persian respectively. Among them sixth was identified as the founder of Zoroastrianism. According to the tradition in Iran, Zoroaster lived 258 years before Alexander i.e. before 330 B.C (conquest of Iran by Alexander).

It is believed that Zoroaster attained his first revelation at the age of thirty. He gave his first preaching at the age of forty. He got success to convert his king Gushtap after two years of his first preaching. Hence it is said that he lived seventy seven years.

When he was of thirty years old he moved to Balkh the capital city of Gushtap (the King of Iran) and this year was claimed as the thirteenth year of Gushtasp’s rule. Zoroaster entered in the court of Gushtap bearing the sacred fire i.e. ‘AdarBurzinMeh’ and a cypress tree with him. Zoroaster performed miracles in the court and able to convince the Gushtap about his claim. The Gushtasp accepted the religion of Zoroaster along with his Prime Minister Frashaoshtra, and Jamaspa and they became the first disciples. Then Zoroaster presented the sacred books ‘Avesta’ to the king. The language of the books believed to have in use around 3000 or 4000 years ago in the region known as ‘Avesta’. According to ‘Fravardin Yasht’, there were about two hundred people who became the principal disciples besides Frashaoshtra and Jamaspa. Mediomah is provided the first rank among his principal disciples whereas Gushtasp have been assigned the twentieth position in the rank of principal disciples. The queen, Hutosh was also among one of his disciple. The patronage of king helped its spread and soon whole Iran converted to the Zoroastrianism.

The information about the three daughters of Zoroaster – Freni, Pouruchisti, and Thrithi is found mentioned in ‘Avesta’. The ‘Pahlavi’ works speak about his three sons – Urvvatatnara, Isadvastara and Havareehithra. The ‘Avesta’ does not provide information about the later days of Zoroaster but the later Persian and Pahlavi books provide the information about his death. Zoroaster was killed with the help of a sharp instrument by Turbaratur

during the prayer. It is believed that Turbaratur was also killed on the spot after the incident.

18.2.2 Zoroastrianism

Zoroastrianism with its history of more than 3000 years is considered as one of the most ancient religions. The three phases are identified in the development of Zoroastrianism as a religion-:

Firstphase: It is known as Zarathushtrianism. In this phase the writings credited to Zoroaster himself and hence the texts like ‘Gathas’ containing religious content.

Secondphase: The second phase is called Zarathushtricism. It refers to the period of growth and religious content of younger ‘Avesta’ was developed during this phase.

Thirdphase: Zoroastrianism is considered as the third phase. The ‘Sasanid’ religion of this period classified as Zoroastrianism.

18.2.3 The Important Religious Aspects

The Zoroastrian Pantheon: The preaching of Zoroaster is found focused around the monotheism inspite the peoples of the region were inclined towards the polytheistic faith. He deliberately provided the name of God as ‘Ahura Mazda’ instead of the word ‘Daivas’. He considered the Daivas as progeny of ‘Angra-mainyush’ having demonic powers. Later on, it is found that Zoroastrianism absorbed many of the ideas and value systems for that it had rebelled. Due to the historical development in Iran and contacts with the people of other faith, the practices based on polytheism and elaborate rituals entered into Zoroastrianism with time.

The Sacred Fire: Fire is considered as the most relevant symbol of Zoroastrianism. They are not in the practice of worshipping the fire but it is referred as the symbol of ‘Ahura Mazda’. The idol worship is not preferred in Zoroastrianism. The Fire’s brightness, its activity, purity and virtue symbolizes perfectly the nature and ‘Ahura Mazda’ – alone to be worshiped. Fire is also considered as the witness of sacrifice i.e. Yasna and the object of Priest’s address as well as Hoama offering. The ritual fires are classified in to three types – each for the priests, warriors and farmers. There are five natural fires considered to be residing in front of ‘Ahura Mazda’ – fire in the body of humans, animals, plants, clouds and in Earth.

The Priesthood: The priests during the ancient Medes formed a distinct priestly class called Magi. The priesthood is considered hereditary in nature in Zoroastrianism. The son and the daughter of priest is known as – ‘Osto’ and ‘Osti’ respectively. These words are derived from the Avesta term ‘Havishta’ which means – ‘one who prepares the sacred drink’. The priesthood was accessible to women as well in the early times but gradually this ceased. To prerequisite qualities to qualify as priest is – one must be free from any kind of physical disability or illness and one must had memories the Avesta. It is not necessary to memories ‘Vendidad’ to qualify as priest. It is one month long initiation ceremony – Nevar, which initiate one into the priesthood. After initiation into priesthood one is called ‘Ervad’ i.e. the master of art in teaching and performing sacrifices. With the advances in knowledge, experience and understanding one is designated with ‘Mobed’. The highest degree for the Priestly status is called Dastur. It is required to complete the study of the Avesta and its recitation with ritual practices for Ervad to

acquire this position. The common consensus is mandatory to be conferred for priest as this position brings with extraordinary privileges and predominance in performance of the ceremonies.

18.2.4 The Important Religious Ceremonies

Navjote: Zoroastrian children are formally admitted into the religious community through the ‘Navjote’ ritual. In this initiation ceremony both boys and girls are invested with two sacred items – the white undershirt (*sudra*) and the sacred thread (*kusti*). Earlier, it was done around the age of fifteen, but now a day it is usually performed between the age of seven and fifteen depending on the community.

The ceremony is held before the sacred fire, symbolizing righteousness. On a tray new ‘*sudra*’ and ‘*kusti*’ are placed along with a fresh set of clothes. The child begins by reciting the ‘Ahuna Vairya’ prayer and the priest then dresses the child in the ‘*sudra*’ which is followed by the tying of the ‘*kusti*’ three times around the waist. While doing so, the child recites the ‘Nirang-i-kusti’ affirming the articles of faith.

This rite is considered a spiritual rebirth – like second birth in Hindu tradition. From this onwards, the ‘*sudra*’ and ‘*kusti*’ must be worn at all the time. One must girdle ritually untied and tied again during prayers or purification acts (*Padyab-Kusti*). This ensures the constant purity of body and soul before religious activity.

Padyab- Kusti: The ‘Padyab-Kusti’ must be performed before a Zoroastrian takes part in any religious activity to ensure the purity both body and soul. This ritual is prescribed for several occasions – on waking up in the morning, before meals, before bathing, at the start of each of the five daily prayer times, and after acts of urination or excretion.

When entering a fire-temple, all Zoroastrians perform this ablution to make sure that their worship and rituals are carried out in a state of purity. The Padyab-Kusti includes a cleansing act, which makes it different from the simpler Kusti ceremony. In the simpler form, a person who is already ritually clean only unties and reties the sacred girdle (*kusti*) without performing ablutions. This simpler rite is often called “renewing the sacred girdle.”

The Wedding Ceremony: A Zoroastrian concept of marriage is a sacred union two souls join to complete each other with the goal of doing good by maintaining self denial. Before the ritual, the bride and groom undergo ablutions, prayers, and acceptance of the sacrament. A fire in a chalice and an oil lamp are placed nearby. During the ceremony, the couple sits facing each other, separated by a screen. Their right hands are joined while priests recite sacred verses. A cotton thread is tied around their clasped hands and then passed seven times around the couple, symbolizing unity. Once the screen is removed, they sprinkle grains over each other, and then sit side by side. The marriage vows are pronounced three times in front of witnesses, sealing the union.

The Death Ceremony: In Zoroastrian belief, death is associated with evil. The funeral rites aim to limit the influence of demonic forces. The body is not buried or cremated here because it is believed that this would pollute the earth, water or fire. Instead, it is placed in a ‘*dakhma*’ i.e. Tower of Silence – a circular stone structure with open access to the sky and high protective wall to ensure the easy access of birds of prey consume the remains. The corpse is washed, dressed in clean white cloth, and then carried to the tower. This practice prevents

contamination of the natural elements and allows the soul's journey to begin. There is a concept of annual ceremony to commemorate the dead.

Check Your Progress (CYP)–I

Based on the understanding of the previous section, answer these questions in your own words:

Q1. Discuss the early life of Zoroaster.

Q2. Write a short note on the ceremony of 'Navjote'.

Q3. Fill in the blanks.

- (i) The Zoroastrian initiation ceremony admitting children into the faith is called _____.
- (ii) During initiation, the child is invested with the white undershirt called _____ and the sacred thread called _____.
- (iii) The purification ritual performed before religious activity is known as _____.
- (iv) Zoroastrian funeral practice places the body in a structure called a _____ (Tower of Silence).
- (v) During the wedding ceremony, a cotton thread is passed _____ times around the couple to symbolize unity.

18.3 ZOROASTRIANISM: PHILOSOPHY

As far as Zoroastrian philosophy is concerned, the most distinguishing feature is ethical dualism, i.e. the fight between good and evil. The supreme God is Ahura Mazda who symbolizes truth, light, wisdom, and goodness. One of the most important philosophical concepts in Zoroastrianism is the resistance between Asha (order, truth, righteousness) and Druj (chaos, deceit, evil). The core idea is that human beings should always use good thoughts, say good words, and perform good deeds.

18.3.1 The God

According to Zoroaster, the God has two principle functions – creation and governance. He creates as the good artificer and governs as the preserver of the universe. The ‘Ahura’ and ‘Mazda’ was combined to conceive one God – ‘Ahura Mazda’ as the great creator and governor of the universe. The creating authority of the universe is ‘Ahura’ whereas ‘Mazda’ is considered as the governing authority which governs both the visible physical and the invisible moral world. As the creator, He is ‘Vahishta Manah’ i.e. Best Reason or the father of Reason and as the governor of the universe, He is ‘Asha Vahishta’ i.e. Righteousness. At the same time He is also considered the Destroyer – the increaser as well as the decreaser.

The god is conceived by Zoroaster –

- as supreme among celestial beings
- beyond space and time
- absolute
- the immovable mover of the universe
- without form
- without beginning or end
- omnipotent
- omniscient
- pure and
- essence of goodness.

18.3.2 Important Principles and Ethical Values

According to Zoroastrianism, the world is full of the conflict between good and evil forces. Therefore, Zoroaster conceived with two primeval principles – Spenta-mainyush (constructive) and Angra-mainyush (destructive), which work under Mazda. Good principles are those which ensure the greatest good of the greatest number of humankind. On the other hand the Evil principles lead to the misery and pain. However, these twin principles do not reflect dualism since Angra-mainyush, also known as Aharman who is not visualized as omniscient and almighty. The Spenta-mainyush is considered as the cause for all good and useful in the nature. It is represented in all shining and bright which appears in blazing fire as a beneficent principle. On the other hand the Angra-mainyush is considered to be appeared in charcoal. The Spenta-mainyush represents the truth, light, knowledge and goodness whereas; the Angra-mainyush is the falsehood, darkness, ignorance, and wickedness.

Ethical Values: The Ethics of Zoroastrian are centered on the three aspects – manashni i.e. thoughts, gavashni i.e. words and kunashni i.e. actions. These three are borne influence of Spenta-mainyush and Angra-mainyush on the human being. These are considered to be found in creation and manifested in the form of Vohumani i.e. Good

Mind and Akamana i.e. Evil Mind in the human. Based on the type of mind that dominates the nature, the result follows. Humata i.e. good thoughts, hukhta i.e. good words and hvarshtai.e. good actions are the results of good mind whereas dushmatai.e. evil thoughts, duzukhta i.e. evil words and duzarshatai.e. evil deeds are regarded as the results of evil mind. It is everyone's duty to establish the right principle in them and to destroy the evil one. The Zoroastrian ethics guides everyone to do that mainly through agricultural activity, domestication of animals and their rearing etc. the killing of wild animals and the evils is also considered in the principle. The gist of their ethics is to have truth in thinking, speaking and doing. The Social and the Religious system of the Parsis consider that good thoughts, words and action can be achieved through honesty, charity and truthfulness.

Apart from this there are several virtues written in the Zoroastrian religious texts. Some are –:

- It encourages having love with order and harmony and hates disorder and disharmony.
- It recommends being obedience to parents, teachers and the rightful government.
- It gives value to cleanliness and sanitation.
- To maintain the purity of Earth, Air and Water are the duties of every individual.
- It doesn't recommend fasting but give priestly value to the one living with the virtue of moderation and temperance.
- Charity is also greatly valued as a virtue. To provide education, helping the needy and to help someone to get married and live life with honour are the three kinds of charitable actions mentioned in 'Vendidad'.

18.3.3 Concept of the World and Place of Man

The world: In Zoroastrian cosmogony, there are three key phases in the universe's existence: first, Bundahishn, which refers to the creation of the world; second, Gumezishn, which involves the revelation of the Mazdean good religion; and third, Wizarishn, representing the ultimate transformation. The active role of Angra-mainyush is evident in the chaotic state of material existence, where living and non-living entities are seen as a result of the combination of Good and Evil.

The creation of the world is delineated into six sequential stages: first, the sky was formed from stone and rock crystal; second, water was created; third, the earth came into being; during the fourth stage, vegetation emerged; in the fifth stage, animal life was introduced; and the sixth stage is dedicated to the creation of human beings.

It is thought that the earth is surrounded by a towering mountain range known as 'Hara Berezaiti' and split into seven regions referred to as 'keshwars'. The largest section among these on the earth is called 'Khvaniratha', which is exclusively populated by humans. Mount 'Hara' is similar to Mount 'Meru' or 'Sumeru' from Indian mythology, situated at the center from which waters flow into the sea named 'Vourukasha'. Two significant rivers – Ranha and Daitya emerge from this sea and create the western and eastern boundaries of 'Khvaniratha'. Mount Hara stands as the highest point on earth, from which the soul embarks on its celestial journey. In the center of the 'Vourukasha' sea lies the tree of all seeds. Another tree exists that possesses healing abilities and

grants immortality, referred to as the white 'Haoma' – the leader among plants.

The origin of all good creatures can be traced back to 'Gavaevodata', which refers to the bull. The initial human pair – 'Mashya' and 'Mashyanag' – emerged from 'Gaya-maretan', meaning human life. Both 'Gavaevodata' and 'Gaya-maretan', the archetypes of animals and humans respectively, were slain by 'Aharman', the evil spirit. In the universe, everything exists in duality, represented by 'menog' and 'getig'. The former pertains to the spiritual or mental realm, while the latter denotes physical or material existence. This concept resembles the Platonic idea of the realm. Existence unfolds in three fundamental phases: the first phase involves creation, which is the division of the spiritual from the physical; the second phase is characterized by their intermingling; and the third phase signifies the ultimate separation of the two.

Place of Man: Man is composed of different parts – the spiritual, the material, and the vital. The physical or material part is known 'astanu' whereas 'gaya' and 'ushtana' are the two vital parts. The two spiritual parts are 'urvan' i.e. soul and 'fravashi' i.e. spirit, have their twin faculties of 'manas' i.e. mind and 'baodhas' i.e. consciousness. The spiritual part exists prior to attaining the physical and vital parts. At the time of birth the spiritual part combines to constitute the physical and the vital and at the time of death it gets again separated from it.

A healthy body is highly recommended as the soul can function in a healthy body and the body is considered as the instrument for the soul and spirit. Therefore, the soul is responsible for all the deeds of the body and it has to receive due reward or punishment after death. Hence, the concept of entering heaven or hell and commences the next life.

The 'fravashi' is feminine in gender and directs soul in the right direction on every walk of life. This concept is found in the Avestan literature and found missing in the 'Gathas'. At the body level, it protects and guides the one from different dangers. She is regarded as the companion of 'Urvan'. She is not accountable for the act of body but she is a protector of the Soul. 'Fravashi' guards the world of 'AhuraMazda' from the evils of 'Angramayush'. She becomes the guardian of an individual since birth by entering into the body along with the 'urvan' and gets separated at the time of death from the body.

'AhuraMazda' fulfills the soul of an individual with the following – "khratu(knowledge, energy) and chisti(wisdom), ushi(intelligence, perception, sense) and means(mind or thought), vachas(speech) and shkyaothna(action), vaso/*kama* (free will) and daena(religious animated conscience), ahu(practical conscience) and fravashi(guardian angel), and baodhas(consciousness, memory) and Daena(vision or the revealed religion)."

The soul being empowered with the different qualities has to perform his duties with utmost sincerity. The Zoroastrians believe in individual will and conviction with a strong determination to deal with evils and bring the best out of them. They do not believe in fatalism or in some kind of grace.

18.3.4 Concept of Liberation

The soul is immortal according to the Zoroastrians. The process and the conditions of soul after the death dealt

with in the Avesta writings and the Pahlavi literature. It is found in the avesta writings, the ‘Hadokht Nushk’ – chapter nineteen of Vendidad; and in the Pahlavi texts, Minokheard and Viraf-nameh. They consider ‘Hom-i-sophid’ – a plant as an emblem to represent that the soul is immortal. The heaven or ‘Vahishta-ahu’ is represented with magnificence, gleam and glory and hell or ‘Achishta-ahu’ as gloom and darkness. The ‘Chinvat’ or the discerning ground is the bridge between the heaven and the world where man has to make available his life account.

It is mentioned that the souls who succeed crosses the bridge and live in purity and eternal joy. The retributive justice is done on the basis of deeds by awarding reward and punishment. The good souls enjoy, accompanied by other liberated souls and the wicked ones go down the bridge into the darkness.

The souls would be rewarded and punished lasting till ‘frasho kereti’ – that is till the whole creation starts afresh after the renovation and ‘ristakhez’ – resurrection of the dead. When the present cycle of existence ended, the ‘soshyant’ will arise. The world enters the new cycle which doesn’t have evil or misery as the wicked are forgiven and purified at the end of the cycle and soul of the virtuous rise again.

Check Your Progress (CYP)–II

Based on the understanding of the previous section, answer these questions in your own words:

Q1. Discuss about the idea of the world in Zoroastrianism.

Q2. Write a short note on the concept of Liberation in Zoroastrianism.

Q3 Fill in the blanks.

- (i) The first phase of the universe’s existence in Zoroastrian cosmogony is called _____, referring to creation.
- (ii) The towering mountain range believed to surround the earth is known as _____.
- (iii) The bridge that souls must cross after death for judgment is called the _____ bridge.

- (iv) The heaven of glory in Zoroastrian belief is known as _____, while hell is called _____.
- (v) The final renovation of the world after resurrection is referred to as _____.

18.4 LET US SUM UP

Zoroastrianism is an ancient religion of Iran that was founded by the prophet Zarathustra (Zoroaster) probably between 1500–1000 BCE date contested. This emerged from the Indo-Iranian religious tradition but underwent a fundamental reformulation of theology in which Ahura Mazda, the master of truth, wisdom and the cosmic order (Asha) is worshipped.

A key aspect of Zoroastrianism is that of ethical dualism as expressed in the conflict between the good spirit Spenta Mainyu and the evil spirit Angra Mainyu (Ahriman). Human beings are not passive observers but active participants in this struggle. We are responsible for an active choice, to choose the truth as against falsehood (Druj) with moral behaviour captured in the maxim, ‘Good Thoughts, Good Words, Good Deeds.’

The Avesta, primarily consisting of the Gathas, is the sacred scripture of Zoroastrianism. The Gathas are the earliest and best hymns attributed to Zarathustra. Zoroastrianism rose to political prominence during the Achaemenid Empire and was further institutionalized during the Sassanian Empire, when it operated as a state-supported religion with an organized priesthood.

Ritual acts stress on purity, respect to fire as divine light, distinct funeral practices of exposure of dead in dakhmas to prevent pollution of natural elements, and more. Zoroastrianism has various eschatology. That is, after death judgment, heaven and hell, resurrection, coming of the savior (Saoshyant) and final renovation of the world (Frashokereti), etc. have attracted scholars with an impact on Abrahamic faiths. The Avesta, especially the Gathas, is the main sacred text of Zoroastrianism.

18.5 GLOSSARY

Ahura Mazda: The supreme god in Zoroastrianism and creator of the universe. It represents truth, light, and goodness.

Spenta Mainyu: The beneficent spirit of Ahura Mazda associated with creation and goodness.

Angra Mainyu (Ahriman): The evil spirit opposed to Ahura Mazda, symbolizing chaos, darkness, and destruction.

Avesta: The sacred scripture of Zoroastrianism, containing hymns, rituals, and religious teachings.

Gathas: The oldest part of the Avesta, believed to be composed by Zarathustra himself. It contains poetic hymns expressing core doctrines.

Zarathustra (Zoroaster): The founder and prophet of Zoroastrianism, who preached the worship of Ahura Mazda and the path of righteousness.

Fire Temple: A place of worship in Zoroastrianism where a sacred fire is maintained. It symbolizes purity and the presence of Ahura Mazda.

Dakhma (Tower of Silence): A funerary structure where the dead are exposed to elements.

Dualism: The central belief in the ongoing struggle between good (Ahura Mazda) and evil (Angra Mainyu).

18.6 EXAMINATION ORIENTED QUESTIONS

- Q1. Examine the life of Zoroaster and its contribution to establish a new faith Zoroastrianism.
- Q2. What are the important religious ceremonies in Zoroastrianism, explain?
- Q3. Discuss the important ethical values of Zoroastrianism.

18.7 LESSON END EXERCISES

- Q1. Explore the Zoroastrianism as a religion.
- Q2. Explain the philosophy of Zoroastrianism

18.8 ANSWER KEY

CYP-I

- Q1. Refer sub-section 18.2.1
- Q2. Refer sub-section 18.2.4
- Q3. (i) Navjote (ii) sudra; kusti (iii) Padyab-Kusti (iv) dakhma (v) seven

CYP-II

- Q1. Refer sub-section 18.3.3
- Q2. Refer sub-section 18.3.4
- Q3. (i) Bundahishn (ii) Hara Berezaiti (iii) Chinvat (iv) Vahishta-ahu; Achishta-ahu (v)
frasho kereti

18.9 SUGGESTED READINGS

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RELIGIOUS DEVELOPMENT

SEMESTER-I

UNIT : IV

COURSE NO. : HIST104

LESSON : 19

JUDAISM

STRUCTURE

19.0 Learning Objectives and Outcomes

19.1 Introduction

19.2 Judaism: Understanding the Religion

19.2.1 The Moses and his Monotheism

19.2.2 Judaism: Evolution through Time

19.2.3 New Testament Judaism and Rabbinic Judaism

19.2.4 Rabbinic Judaism: Literature

19.3 Judaism: Philosophy

19.3.1 The God

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19.4 Let us sum up

19.5 Glossary

19.6 Examination Oriented Questions

19.7 Lesson End Exercises

19.8 Answer Key

19.9 Suggested Readings

19.0 LEARNING OBJECTIVES AND OUTCOMES

Learning Objectives

The objective of this lesson is to enable you to:

- explain the philosophical and religious aspects of Zoroastrianism.
- evaluate the major religious ceremonies and different forms of worship.
- examine the priesthood, its prominent deities of Zoroastrianism.
- identify the significance of the sacred fire in Zoroastrianism.

Learning Outcomes

After going through the lesson, you will have a clear understanding about:

- the origin and historical journey of Judaism.
- the role of Moses in the development of Judaism as a monotheist belief.
- the important philosophical concepts in Judaism.
- the development of Christianity from Judaism.

19.1 INTRODUCTION

Dear learner, Judaism is one of the oldest religions in the world that has been practiced continuously, and it originates from the ancient Near East. Judaism is more than just a religion; it is a civilization that is organized around law, ethics, ritual practices, collective memories, and individual identities. Judaism originated among the ancient Israelites and developed religious beliefs based on covenantal theology, the belief in a covenant relationship between God and a chosen people, which is traced back to Abraham and later described through the leadership of Moses.

Judaism is based on the foundational texts of the Hebrew Bible, known today as the Tanakh. The Tanakh is divided into three divisions: the Torah (Law), Prophets, and Writings. The Hebrew Bible encompasses the theological story of the Jewish people and Jewish law, as well as the ethical traditions and historical traditions within Judaism. Over the centuries since the Hebrew Bible was written, Jewish scholars have expanded on the Hebrew Bible through interpretation, resulting in the Talmud, a large collection of legal discussions, arguments, and ethical teachings that helped shape Judaism since the end of the biblical era.

Judaism has gone through a number of significant developments over time. When there were Jewish countries called Israel and Judah, the Judaism of that time was heavily associated with these nations and with the central worship location, the Temple in Jerusalem. In 70 CE when the Romans destroyed the Temple, Judaism dramatically changed again as there were no longer sacrificial offerings available. Instead, Judaism was led by Rabbis (people who interpreted the laws of Judaism) and was completely text-based and community-based in how to live as a

Jew. Because of this developmental change, Judaism was able to sustain and develop for many centuries while Jews lived (diaspora) in all areas of the Middle East, Africa and Europe.

Judaism is also historically important as it went through a number of steps within Judaism and also, Judaism has had a large impact on all other major Monotheistic religions. Furthermore, Jewish history provides an example of cultural strength and the way minority identities are developed, and how Religion interacts with Political power, through the many Empires and Nations/State including today's Israel.

19.2 JUDAISM: UNDERSTANDING THE RELIGION

Judaism is one of the world's oldest monotheistic religions. The key element of Judaism is the concept of a **covenant** – a sacred agreement between God and the Jewish people. This covenant was first established with Abraham and later reaffirmed with Moses at Mount Sinai. It binds the community to follow God's commandments. These commandments are recorded in the **Torah** – the most important of the Jewish sacred texts provides guidance on religious rituals, ethical conduct, and social laws.

Judaism is not just a system of beliefs but a way of life. Judaism is a rich and enduring religious tradition that combines faith, law, ethics, and community life. It offers a comprehensive framework for understanding the relationship between God, humanity, and the world.

19.2.1 The Moses and his Monotheism

Moses demonstrated his magical abilities to the Pharaoh of Egypt, successfully captivating him. As a result, he was able to secure freedom for the Jewish people in Egypt. Subsequently, he guided the Jews out of Egypt towards the sacred land of Israel. To ensure harmonious relations among the conflicting tribes, he established prudent laws and provided the Ten Commandments:

- (i) I am the Lord your God who has brought you out of Egypt, from the house of slavery. You shall have no other gods besides me, and you shall not create any carved images.
- (ii) You shall not misuse the name of the Lord your God.
- (iii) Keep the Sabbath day sacred and observe it.
- (iv) Honor your father and mother.
- (v) You shall not murder.
- (vi) You shall not commit adultery.
- (vii) You shall not steal.
- (viii) You shall not give false testimony against your neighbor.
- (ix) You shall not desire your neighbor's house.
- (x) You shall not covet your neighbor's wife.

There was a discussion about whether monotheism or monolatry was present during Moses' time. Monotheism asserts that no other gods exist, while monolatry acknowledges the existence of other deities but promotes the worship of just one god. Scholars argue that Moses was the one who introduced monotheism.

19.2.2 Judaism: Evolution through Time

Moses guided the people towards the sacred land of Israel, but he passed away before they could reach Canaan. Following him, Joshua assumed leadership to lead them into the holy land. Various texts present differing views on the conquest of Israel. The book of Joshua claims that Canaan was taken by force, while the Book of Judges suggests it was a process of gradual settlement. Archaeological evidence also supports this latter viewpoint. Additionally, another interpretation exists, indicating that the highlands of Canaan attracted two groups: the coastal tribal inhabitants (Canaanites) and Moses' followers.

When Moses' group arrived in the highlands from Egypt, they encountered people who had migrated from the coastal regions in search of a safer environment due to ongoing wars, famine, and slavery. For these people, the hilly terrain offered safety for two main reasons – first, the chariots, which were the primary weapon of warfare, could not navigate the cliffs, creating a relative peace for them known as the land flowing with milk; second, the area provided abundant wild honey, fruits, and animals for sustenance, referred to as the land flowing with honey.

In this setting, the coastal tribes, specifically the Canaanites, and Moses' group exchanged their experiences and recognized that the same deity had freed them from their oppressors. They established a tribal confederation founded on three commonalities – One God, One People and One Land.

Under David and Solomon's leadership, significant progress was made in political unification, intellectual achievements, and religious devotion. David effectively merged spiritual authority with political leadership, as his selection as king was viewed as a divine appointment. This was succeeded by the choice of Mount Zion as the designated residence for Yahweh. David relocated the Ark of the Covenant to Jerusalem, establishing it as the capital of Israel's theocratic government. Over time, Jerusalem emerged as a vital city, serving as the religious and political center of Judaism. Solomon transformed Jerusalem into the Temple city, leading to the gradual decline of shrines located in other regions of the country.

According to Jewish beliefs, the world was thought to consist of three continents – Asia, Africa, and Europe, which were said to originate from the three sons of Noah: Shem, Ham, and Japheth respectively. The peoples of Asia, known as Semites, are descended from Shem, those in Africa from Ham, and Europeans from Japheth. Jerusalem is viewed as the center of the world, with the worship of Yahweh focused on the temple located in Jerusalem.

After Solomon's death in 921 BC, the kingdom split into two – (i) Israel, the Northern Kingdom, consisting of ten tribes – Reuben, Simeon, Levi, Issachar, Zebulun, Gad, Asher, Dan, Naphtali, Ephraim, and Manasseh, often referred to as the 'ten lost tribes,' and (ii) Judah, the Southern Kingdom, which included the tribes of Judah and Benjamin. Jerusalem became the capital of Judah, which was governed by Rehoboam.

This division affected the unifying aspect of Judaism both in political and religious contexts. Jeroboam, the king of Israel, built numerous shrines in the northern region to discourage his people from traveling to Jerusalem, which allowed pagan practices to infiltrate and led to a blending of religious beliefs. Although the representations of calves were meant to signify the Covenant-God Yahweh, the worship that emerged was inferior when compared to the worship in Jerusalem, which was devoid of any images. The Omri dynasty in Israel established a new capital at Samaria and promoted Phoenician idol worship. Queen Jezebel, the wife of Ahab, constructed an impressive temple dedicated to her god Baal in this new capital. However, the prophets of Israel condemned these idolatrous practices.

During the eighth century, prophets such as Amos, Hosea, and Isaiah of Jerusalem emphasized the core principles of the Mosaic covenant, which focused on fulfilling duties and showing love towards others, while criticizing hollow rituals. This change redirected attention from the mechanical execution of religious practices to a life grounded in ethical conduct. Efforts were made toward reforming pure worship, specifically the Yahweh-cultus in Jerusalem, during the reigns of Jehoshaphat, Hezekiah, and Josiah. In 721 BC, Israel was conquered by the Assyrians, who were then resettled in Samaria and intermarried with the locals, resulting in a mixed population known as Samaritans. They strongly believed that true worship ought to take place on Mount Gerizim.

In 605 BC, the Assyrians were vanquished by the Babylonians, leading to the destruction of Solomon's Temple. The Jewish people were exiled but held on to the hope of a future unification under a Messiah—a leader who would be religious, political, and military. This Messiah was believed to be a descendant of David. During their time in exile, Judaism underwent significant transformation, placing an emphasis on spiritual purification. In 535 BC, Cyrus, the Persian ruler, defeated the Babylonians, and by 537 BC, the Jews were permitted to return to their homeland in Palestine. While many opted to come back to Jerusalem, some chose to stay in Persia. Those who returned sought to re-establish a theocratic system.

Eventually, two new groups emerged among the people of Israel – one called the Pharisees (meaning Separatists) who were strict, and the other known as the Sadducees, who were more lenient in their adherence to the Mosaic Law, primarily consisting of the priestly class and willing to adapt to contemporary demands. The Sadducees recognized the written Torah as authoritative, while the Pharisees also valued the authority of the Oral Torah. The Jewish historian Flavius Josephus mentioned another faction among the Jews in his work, *Antiquities of the Jews*, known as the Zealots, who adhered to the Fourth Philosophy advocating for armed resistance against foreign rule. In 63 BC, the Roman general Pompey invaded Palestine, leading to Roman control over the region until the time of the New Testament. The Temple was demolished and set ablaze in 70 AD, leading to the dispersion of the Jewish people across the globe.

During the Middle Ages, Europe and Western Asia were split between Christian and Islamic nations. The Jewish population was also divided into two primary groups – Sephardi and Ashkenazi. Sephardi Jews were primarily found in Spain and Portugal, culturally associated with Babylonian Jews living under Muslim governance. In 1492 AD, they were forced to leave and relocated to North Africa, the eastern Mediterranean, the Far East, and Northern Europe. Conversely, Ashkenazi Jews were connected to the Jewish cultural heritage of Palestine and

Rome. They predominantly settled in France, Germany, and Poland. The 18th century was significant for the Jewish Enlightenment, known as Haskala.

In the 19th century, Conservative and Reform Judaism emerged as movements aiming to soften the rigid practices of Orthodox Judaism. They believe that the idea of revelation can be interpreted in various ways. They argue that Jewish law is not fixed, but has evolved to meet the demands of changing circumstances. They accept the Torah as a sacred text authored by prophets who were inspired by God, but they reject the Orthodox belief that it was dictated by God to Moses. They stress that differing interpretations of scriptures and laws should not cause divisions within the Jewish community. They acknowledge the importance of other religions in the salvation of humanity. They promoted the idea that men and women should be able to sit together in a synagogue.

Reform Judaism, also known as Liberal Judaism, emerged as a response to the Enlightenment movement in Germany known as Haskala. Adherents believe that traditions can be accepted, rejected, or altered to suit the needs of each generation, and every generation holds this right. They have largely dismissed many of the ritual laws found in the Torah, placing greater emphasis on the ethical teachings of the prophets. While they may choose to observe dietary laws, they consistently uphold the observance of the Sabbath and other holidays within the sacred calendar. In their synagogue services, it is not compulsory for men to wear yarmulkes or tallits. Prayers are recited in the local language rather than in the traditional Hebrew. Women are assigned an increased role within the service. Reform and Conservative Jews hold the belief that the arrival of freedom and justice will not happen spontaneously but will require both divine assistance and human effort.

Toward the end of the nineteenth century, Zionism developed as a consequence of reform. Judaism in Europe faced horrific persecution during the Holocaust, where six million Jews were murdered by the Nazis under Adolf Hitler, who sought the total extermination of all Jews. Certain Karaite communities, who are scripturalists, were spared during the Holocaust because the Nazis did not classify them as Jews. This Holocaust stands as one of the most significant instances of religious and racial intolerance in history. Numerous Jews residing in Spain were also executed in the name of faith and ethnicity. These events resulted in increased migration to Palestine and eventually the proclamation of the State of Israel on May 18, 1948.

Palestine, historically the ancestral land of the Jews, was under the control of the Turkish Empire until 1917. Following Germany's defeat in World War I, the British seized a significant portion of Palestine as spoils of war. Additionally, a large area was given to a Bedouin Arab named Abdullah as a reward for his support during the conflict, leading to his ascension as the first Hashemite King of Transjordan, now known as Jordan. However, British control over the remaining part of Palestine persisted until 1947, when it was further partitioned into Israeli and Arab Zones, with the Arab Zone assigned to Jordan. This partition was accepted by the Jewish community but not by the Arabs, who opposed the establishment of Israel and subsequently went to war in 1948, ultimately facing defeat. The nation of Israel has made significant advancements despite the challenging circumstances in the Middle East. The rich history of the Jewish community is celebrated through the figures of Abraham, Moses, Solomon, and Jesus Christ, as well as Karl Marx, Sigmund Freud, Albert Einstein, and many others.

According to the 2007 census, there are 14.6 million Jews residing in various regions around the globe. Historians assert that trade relations existed between India and Palestine as far back as 3000 BC, with evidence showing Jewish settlements in India since the 1st century AD. A substantial number of these communities were located in Kerala in South India, where a synagogue exists in Cochin, and some also settled in Mumbai and Pune.

19.2.3 New Testament Judaism and Rabbinic Judaism

The New Testament Judaism is viewed as the spiritual continuation of Judaism, which is represented by Christianity. Jesus, Peter, and Paul were all Jewish. Christianity originated as a new faction within Judaism. This group adhered to the teachings of Yeshua of Nazareth, also known as Jesus. They did not abandon their faith but identified themselves as belonging to another branch of Judaism called 'Christian Judaism.'

In 70 AD, the devastation of the Temple in Jerusalem significantly transformed Judaism. The religion became decentralized, no longer focused on the Temple in Jerusalem, as Jews were barred from entering the city. Consequently, Rabbinic Judaism developed during the New Testament era to fill the void left by the temple cult. Authority in religious matters shifted from a centralized priesthood to local scholars and teachers. The local synagogue emerged as the new hub of Jewish life, leading to the discontinuation of animal sacrifices.

19.2.4 Rabbinic Judaism: Literature

During this period, it became essential to compile the moral teachings of Judaism, leading a Palestinian scholar, Rabbi Judah ha Nasi, to gather and organize these teachings from the rabbis. This collection, referred to as the Mishnah, meaning repetition or study, encompassed the teachings of Rabbi Meir and Rabbi Akiba, also recognized as the Jewish oral law. This compilation marked the first time Jewish laws were written down after the Bible. Furthermore, the rabbis in Babylon also gathered and edited portions of the oral law, known as the Talmud, which translates to teaching or learning. This book promotes ethical behavior among all people.

It is said that an angel delivered the Torah to Moses at God's command. It exists in two forms – the oral tradition and the written tradition. The written tradition is found in sacred texts, while the Oral traditions of the Torah were passed down by rabbis through their writings such as Targum, Midrash, Mishnah, Talmud, Gemara, and Tosefta, among others. Additionally, the oral tradition has two branches – Halakkah, which refers to the rules of life, and Haggada, which offers anecdotes that explain these rules. Midrash denotes the inquiry or research into the Hebrew Scriptures, whereas Midrashim refers to the compilations of rabbinic commentaries on the Bible. The later discussions by rabbis about the Mishnah are termed Gemara. In the 3rd and 4th centuries AD, Rabbi Hiyya and Rabbi Oshaia compiled the laws that correspond to the Mishnah, referred to as Tosefta, meaning addition.

Check Your Progress (CYP)–I

Based on the understanding of the previous section, answer these questions in your own words:

Q1. Write a short note on the Monotheism of Moses

Q2. Discuss the New Testament Judaism and Rabbinic Judaism.

Q3. Fill in the blanks.

- (i) Moses demonstrated his magical abilities to the Pharaoh of _____.
- (ii) After Solomon's death, the kingdom split into two – (i) Israel, and (ii) _____.
- (iii) The destruction of the Temple in _____ in 70 AD led to the rise of Rabbinic Judaism.
- (iv) The collection of Jewish oral teachings compiled by Rabbi Judah ha Nasi is called the _____.
- (v) According to tradition, the _____ was delivered to Moses at God's command.

19.3 JUDAISM: PHILOSOPHY

Judaism is one of the oldest monotheistic traditions in the world. The philosophy of Judaism is , embedded with the belief in one and indivisible God that is both transcendent and immanent. The philosophical foundation of Judaism revolves around the covenant between God and the people of Israel – a concept that establishes a moral and spiritual relationship based on divine law and ethical responsibility. The central idea of philosophy of Judaism is **ethical monotheism**. God is not only as the creator force but also as a just and compassionate lawgiver. It places strong emphasis on **law and practice** rather than abstract speculation. The concept of **free will and moral responsibility** is another important philosophical theme. The problem of suffering and evil has also been widely discussed in Jewish thought. Rather than offering a single explanation, Jewish philosophy presents multiple perspectives, including divine testing, punishment, or the mystery of God's plan. The emphasis, however, remains on maintaining faith and pursuing justice despite suffering.

Jewish philosophy is a vibrant blend of faith, law, and ethical reflection. It emphasizes living a moral life in accordance with divine will while encouraging intellectual inquiry and engagement with the world.

19.3.1 The God

In Judaism, God is viewed as a living, personal being who is both holy and merciful. The fundamental concept is the belief in one God, emphasizing the unity and singularity of the universal Creator. God is described as one,

asexual, eternal, and serves as a righteous, compassionate king, judge, and father. Jews recite the Shema prayer on all Sabbaths, festivals, and during daily prayers: “Hear, O Israel: The Lord is our God, the Lord alone. You shall love the Lord your God with all your heart, with all your soul, and with all your might.” In Judaism, great emphasis is placed on sacred texts, their study, and interpretation; hence, Jews are often referred to as “the People of the Book.” The Hebrew Bible serves as the cornerstone of Judaism. It is referred to as TaNaKh, which is an abbreviation for Torah (the initial five books of the Bible), Nebiim (the Prophets), and Khetubim (the remaining writings).

19.3.2 Beliefs and Practices of Judaism

The ceremony of circumcision, known as Brit-milah, is conducted for a Jewish boy on the eighth day after his birth. The zaved habat, which is the naming ceremony for a Jewish girl, also takes place on her eighth day of life. Jewish boys begin their studies of the scriptures with a rabbi at the age of seven and continue until they reach twelve, during which time they take a temporary vow to be Torah students. At thirteen, the boy recites a section from the Bible and becomes a son of the commandment, or barmitzvah, marking his full membership in the Jewish community. Nowadays, a similar ceremony for girls, called bas-mitzvah, signifies their status as daughters of the commandment.

Marriage: In the tradition of Orthodox Judaism, a wedding involves a marriage contract known as a ketubah, which is created for the bride and groom and requires signatures from two witnesses. This document outlines the groom’s responsibilities towards the bride. The marriage ceremony occurs beneath a huppa, or canopy, symbolizing the union of the couple and their future home together. A ritual involving the couple sharing a sip of wine from a single cup signifies the life they will live in partnership. The ceremony concludes with the groom breaking a glass in a moment of joy, serving as a reminder of the destruction of the temple.

Mournful: Following the funeral services, the close family members observe Shiva (which means Seven in Hebrew) – they remain in their homes for a period of seven days, except on the Sabbath. They do not engage in mourning on the Sabbath. During their mourning, they recite the Kaddish – a prayer composed in Aramaic. Orthodox Jews commemorate the memory of their parents for an entire year and say Kaddish every day. The anniversary of a death is noted as yahrzeit, and memorial prayers are recited on holy days known as yizkor.

Festivals: In Judaism, the themes of creation, revelation, and redemption are commemorated through various festivals. The primary pilgrimage festivals include Pesach, also known as Passover, Shavuot, or Pentecost, and Sukkoth, referred to as Tabernacles. Yom Kippur, recognized as the Day of Atonement, and Yom Hashanah, celebrated as the Day of Remembrance or New Year’s Day, are observed as high holidays. Other significant festivals observed by the Jewish community include Hanukkah, which is the festival of lights or the Jewish version of Diwali, and Purim, known as the festival of Lots. The Sabbath is celebrated as a weekly holiday.

Synagogue: In the synagogue, an Ark is maintained for the Torah scroll, along with a bimah, which is the platform used for reading the Torah, and a ner tamid, or eternal light, which features a lamp that remains lit continuously. Additionally, there is an amud, or pulpit, located in front of the Ark where the hazzan, or prayer

leader, stands during prayers. Within Judaism, a Yeshiva refers to a Jewish educational institution, whereas a mikvah is designated as a ritual bath.

19.3.3 Judaism in Daily Life

Judaism does not have a central authority that issues religious doctrines, nor is there a global organization overseeing religious observances. The rabbi serves as a spiritual mentor, educator, and interpreter of Jewish law and sacred texts. Orthodox Jews maintain that every word of the Torah was given by God at Mount Sinai. They also adhere to the statutes found in the Shulhan Aruk, a foundational work of Halakhic literature. The Shulhan Aruk is a compilation of guidelines and rulings from recognized and respected rabbis. In the 13th century, Maimonides introduced the Thirteen Principles of Faith, and many Orthodox Jews accepted two of them – Ani Ma’amin and Yidgal. A kippah, also known as a skullcap or hat, is worn by men at all times as a sign of reverence towards God. Some Orthodox men also sport beards and sideburns. The Sabbath is regarded as a complete day for rest, study, prayer, and devotion. During the Sabbath, they refrain from work, travel, or carrying money. To serve as a reminder of God’s presence, they affix a small mezuzah—a wooden, metal, or glass case approximately three inches tall containing 15 verses from the Bible—on the upper section of the right doorpost of their home.

Tefillin, or **phylacteries**, are small boxes containing four biblical passages and are worn by an Orthodox Jew during weekday morning prayers. A leather strap connects one box to the head, while another strap secures the second box to the left arm, close to the heart. During prayer, a Jew also dons a prayer shawl called a tallit, which has tzitzit, or tassels, on its four corners. To guide the daily life of every Jew, the Torah outlines 613 precepts, represented by the threads of the tallit. A kittel is a special garment worn by the prayer leader. For communal prayer, a minyan, which consists of ten adult Jews, is required.

An Orthodox Jew refrains from consuming pork or any products derived from it. They adhere closely to all dietary laws. Kosher refers to food that is prepared in strict adherence to Jewish dietary regulations. They consume beef from cattle and sheep, but avoid shellfish, only eating fish that possess scales and fins. They do not eat beef that has been strangled, but instead, it is slaughtered through a specific method. They keep dairy and dairy products separate and do not serve them during the same meal. In synagogues, men and women are seated in separate areas.

Check Your Progress (CYP) –II

Based on the understanding of the previous section, answer these questions in your own words:

Q1. Write a short note on the ritual of marriage in Judaism.

Q2. Discuss the important religious practices followed by the Jews in their daily life.

Q3. Fill in the blanks.

- (i) The _____ is observed as a full day of rest, prayer, and devotion.
- (ii) A small case containing biblical verses placed on the doorpost is called a _____.
- (iii) _____ are small boxes containing biblical passages worn during weekday morning prayers.
- (iv) A group of ten adult Jews required for communal prayer is called a _____.
- (v) Food prepared according to Jewish dietary laws is described as _____.

19.4 LET US SUM UP

Judaism is one of the world's earliest monotheistic religions, developing from the Ancient Near East through its covenant relationship with the God of Israel. Over more than 3,000 years, the development of Judaism incorporates religious beliefs, laws, culture, and communal memory into a lasting framework of civilization.

Traditionally, Judaism is said to have originated from the covenant made between Abraham – the first Jew – and God. This initial covenant established the basic ethical principles of Judaism based on the concept of one God. The journey of the Jewish People through history is reflected in the shared national culture of Jewish people, which has its origins in the Exodus (the Israelites' flight from Egypt) and in God's giving the nation of Israel the Torah. The Torah forms part of the Tanakh (the Hebrew Bible), which comprises the written tradition of Jewish law, history, prophecy, and poetry. In the opinion of historians, these texts serve as both religious scripture and as a source of evidence for material culture and historical memory.

The Temple of Jerusalem was the central place of worship for the early israelite religion. More specifically, it was the Second Temple (which lasted from (c 516BCE to 70CE), which served as a central location for sacrificial and priestly authority. The destruction of the Second Temple by the Romans in 70CE was a significant turning point. Without a centralized cult, judaism's religious life re-organized around 3 elements; study, prayer, and community. The tradition of rabbinic leaders writing down the oral tradition became known as the Talmud, which contained legal discussions, interpretations, and ethical teachings, and was foundational to normative (halakhah) practice.

The post-Temple era saw Jews living in many places around the Mediterranean Sea, Middle East, and other parts of Europe and beyond. This spreading out of Jews all over the world is commonly known as the Diaspora. Jewish communities continued to share religious texts and customs based on these texts even if they were living

in very different cultures. Jewish thought and mysticism developed during the Middle Ages among both Islamic societies and Christian societies while engaging with the philosophies of those societies. Jews remained committed to their core theological beliefs of strict belief in one god, covenantal relationship with god, and the pursuit of justice.

19.5 GLOSSARY

Torah: The fundamental text for Jewish religious law and tradition.

Tanakh: The complete Hebrew Bible, divided into three parts - the Torah (the Law), the Nevi'im (the Prophets), and the Ketuvim (the Writings). It is the chief authority for Judaism's Scriptures.

Talmud: A collection of rabbinical dialogues on Jewish law, ethics, philosophy, and traditions.

Mishnah: The earliest extant version of the Oral Torah (around CE 200) that organizes Jewish legal practices and serves as a basis for Talmudic commentaries to follow.

Halakha: The entire body of Jewish law, derived from the Torah and Talmud, as well as from later halakhic rulings by rabbis, that regulates all aspects of ritual observance, behaviour, and conduct in daily life.

Diaspora: The ancient forced movement of Jews away from their homeland, the land of Israel (particularly by the Babylonian Exile about the 6th century BCE and the destruction of Jerusalem by the Romans in 70 CE).

18.6 EXAMINATION ORIENTED QUESTIONS

- Q1. Examine the origin and development of Judaism in the modern age.
- Q2. What do you understand with the Rabbinic Judaism Literature?
- Q3. Discuss the important belief and practices followed by the Jews people.

19.7 LESSON END EXERCISES

- Q1. Analyze the historical development of Judaism.
- Q2. Explore the Jewish religious life.

19.8 ANSWER KEY

CYP-I

- Q1. Refer sub-section 19.2.1
- Q2. Refer sub-section 19.2.3
- Q3. (i) Egypt (ii) Judah (iii) Jerusalem (iv) Mishnah (v) Torah

CYP-II

- Q1. Refer sub-section 19.3.2

Q2. Refer sub-section 19.3.3

Q3. (i) Sabbath (ii) mezuzah (iii) Tefillin (iv) minyan (v) kosher

19.9 SUGGESTED READINGS

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RELIGIOUS DEVELOPMENT

SEMESTER-I

COURSE NO. : HIST104

UNIT : IV

LESSON : 20

CHRISTIANITY

STRUCTURE

20.0 Learning Objectives and Outcomes

20.1 Introduction

20.2 Christianity: Understanding the Religion

20.3 Christianity: Philosophy

20.3.1 The God

20.3.2 The Bible

20.3.3 The Bible: the Division

20.3.4 Important Principles and Ethical Values

20.4 Let us sum up

20.5 Glossary

20.6 Examination Oriented Questions

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20.0 LEARNING OBJECTIVES AND OUTCOMES

Learning Objectives

The objective of this lesson is to enable you to:

- explain the philosophical and religious aspects of Zoroastrianism.
- evaluate the major religious ceremonies and different forms of worship.

- examine the priesthood, its prominent deities of Zoroastrianism.
- identify the significance of the sacred fire in Zoroastrianism.

Learning Outcomes

After going through the lesson, you will have a clear understanding about:

- the origin and historical journey of Christianity in a systematic pattern.
- the life of Jesus and its teachings.
- the important philosophical concepts in Christianity.
- the idea of God's kingdom.

20.1 INTRODUCTION

Dear learner, Christianity is an important world religion. Its core belief is existence of only one God. It originated with the life of the Jesus in the early first century CE. As this faith grew, so did its corresponding community of disciples who formed around the shared belief – Jesus was the Son of God and Savior. Their collective belief formed the foundation for future communities that carried forward shared beliefs about Jesus and helped to preserve the teachings of Jesus and His apostles in written form (which would become known as the Bible).

Christianity emerged within the socio-political context of the Roman Empire and initially encountered suspicion and persecution. The transition of Christianity from a persecuted group to an officially recognized religion represents one of the most considerable shifts in religious history. The reign of Emperor Constantine I represented a pivotal moment for Christianity, as his support during the fourth century CE enabled Christianity to expand as an established institution, both gradually through geographic expansion into surrounding urban areas and through doctrinal consolidation. As Christianity expanded, it developed from its origins in Jerusalem and surrounding cities into a globalized religion that would come to influence not only the political sphere but also social ethics, cultural output, and intellectual traditions throughout history.

Christianity once represented a single theology and institution; however, as time progressed, it began to develop into various theological interpretations and institutional forms. There are currently major branches of Christianity, the two largest being the Roman Catholic Church and the Eastern Orthodox Church. Their emergence is attributable to historical movements of varying doctrinal disagreements, cultural contexts, and ecclesiastical.

In addition to its religious identity, Christianity will always play a key and vital role in the history of mankind. In addition to being a religious belief, Christianity has also impacted world civilization in almost every area of civilization including: but it is not limited to; law; governance; education; philosophy; art; societal structure and institutions.

20.2 CHRISTIANITY: UNDERSTANDING THE RELIGION

Christianity is centered on the Jesus of Nazareth i.e. Jesus Christ. He is believed to be both human as well as

divine. Christianity is the religion followed by those who worship him as the Son of God. Christianity is considered as a way of life. The spiritual presence of Jesus is believed to abide in the church.

Jesus: Jesus was born in Bethlehem, located in the Judean region of Palestine, around 3 BCE during Emperor Augustus's rule, into a Jewish family. He grew up in Nazareth, a small village within Galilee. He was crucified under the authority of Pontius Pilate, the Roman governor of Southern Palestine, around 30 CE. The best sources for understanding the life of Jesus Christ are the four gospels—Matthew, Mark, Luke, and John—as well as other texts in the New Testament. The name 'Jesus' comes from the Hebrew name 'Yeshua,' which literally translates to 'God saves.' The term 'Christ' is the anglicized form of the Greek word 'Christos,' which is the translation of the Hebrew word 'Messiah.' Jesus was selected by God for a unique divine mission. Christians recognized the realization of God's kingdom hope in the actions and teachings of Jesus. Therefore, they acknowledged him as the 'Messiah sent by God'.

Death of Jesus: The teachings of Jesus garnered a large following, resulting in many becoming his disciples, from whom he selected twelve to be his apostles. His message centered on a new humanity – rooted in the ethics of God's kingdom – had the potential to disrupt the existing socio-political and religious systems of oppression and exploitation. This posed a threat to the oppressive religious and political leaders of Judaism, as well as the Roman colonial powers in Palestine. Consequently, these exploitative authorities sentenced Jesus to be crucified, leading to the death on the cross. However, it is thought that on third day he came back to life. He filled his disciples with the gift of his Spirit and instructed them to spread his good news all over the world and to them make disciples.

Check Your Progress (CYP)–I

Based on the understanding of the previous section, answer these questions in your own words:

Q1. Discuss the early life of Jesus.

Q2. Write a short note on the death of Jesus.

Q3. Fill in the blanks.

- (i) Christians worship _____ as the Son of God.
- (ii) Jesus grew up in _____, a small village within Galilee.
- (iii) The term 'Christ' is the anglicized form of the Greek word _____.
- (iv) The name 'Jesus' comes from the Hebrew name _____.
- (v) Jesus was born in _____.

20.3 CHRISTIANITY: PHILOSOPHY

In the Christian faith, Jesus Christ is viewed as the Divine Savior of humanity. This belief has profoundly altered how Christians perceive both God and human beings. The core teachings of Christianity are encapsulated in the 'Apostles' Creed. This creed is regarded as a succinct expression of the fundamental beliefs within the Christian tradition, reflecting the essential doctrines of faith. It is thought to have originated from the apostles who were in direct contact with Jesus Christ. The Apostles' Creed is a shorter compilation compared to the Nicene Creed, which serves as a more comprehensive version. The Nicene Creed was created and established by the unified Christian Church during the First General Council of Nicaea, which took place in 325 CE.

20.3.1 The God

In Christian belief, God is understood as Trinitarian monotheism—an eternal communion comprised of three Divine Persons: the Father, the Son, and the Holy Spirit. This represents one singular God who possesses one divine nature and existence, a theological concept that is revealed in Jesus Christ. It highlights the dynamic nature of eternal life and love within God, which serves as the source of all creation.

The key teaching of Jesus revolves around the kingdom of God. Jesus dedicated himself entirely to the mission of God's Kingdom, emphasizing the comprehensive flourishing of human existence. His mission was to instill fundamental human values in the hearts of all individuals, and the goal of this endeavor can be seen in the Jesus concept of 'Kingdom of God'.

20.3.2 The Bible

The term "Bible" refers to the Holy Scripture or Sacred Scripture. It originates from the Greek words 'ta biblia', which means "the books." The Roman Catholic version of the Bible contains 72 books, while the Protestant version includes 66 books. These texts are regarded as the authoritative writings of Christianity. They were composed over a span exceeding 1,000 years.

The Bible plays a crucial role in Christian worship and is regarded as the main foundation of the Christian lifestyle. All knowledge about Jesus Christ is derived from the Bible. As one of the most frequently read books globally, it significantly influences society and culture. Anyone participating in Christian worship typically encounters a passage from the Bible or listens to a sermon based on that passage. The Bible encompasses both the Old and

New Testaments, which Christians hold in high regard as the Word of God. It is seen as a divinely inspired text, conveyed by God in a human language that reflects all the limitations of humanity.

20.3.3 The Bible: the Division

The Bible plays a crucial role in Christian worship and is viewed as the primary guide for the Christian way of life. Our understanding of Jesus Christ comes entirely from the Bible. As one of the most read texts globally, it significantly influences societies and cultures around the world. Anyone participating in Christian worship will hear a sermon taken from the Bible. The Bible encompasses both the Old Testaments and the New Testaments, which is regarded as the Word of God. It is considered as a divinely inspired text that conveys God's message in the language of human, despite being subject to human limitations.

The New Testament is the specific collection of Christian texts found in the Bible. It consists of twenty-seven short books written by Jewish authors in the Greek language, which was the common tongue of the Roman Empire. It commences with the four gospels, which narrate the life and teachings of Jesus. Following these four gospels is the 'Acts of the Apostles,' which recounts the story of the initial thirty years of the Christian church. After that come the thirteen 'letters of Paul,' which detail how the persecutor of Christians transformed into a prominent missionary leader after a striking encounter with the Risen Jesus on the road to Damascus. The initial letter was composed no later than twenty-five years after the death of Jesus, succeeded by eight letters known as the Catholic Letters. Subsequently, there is the 'Book of Revelation' attributed to John, which is a visionary text presented in a specific literary form. This book is viewed as a source of hope, directed towards seven churches facing intense pressure from persecution in the Asia Minor area.

The Gospels: The initial four written books of the New Testament are referred as the 'gospels'. The term gospel merges the words good and spell, signifying good news. In Greek, the expression for 'good news' is Euangelion, this was the term originally used for gospels by the four distinct authors – Matthew, Mark, Luke, and John – who composed them. These authors are termed as evangelists. Their writings are known as gospels because they contain the events of Jesus Christ's life and his messages, which are viewed as good news for humanity.

20.3.4 Important Principles and Ethical Values

Christians in the most churches during their Sunday services recite the Apostles' Creed. This consists –

"I believe in God, the Father almighty, creator of heaven and earth!

I believe in Jesus Christ, his only Son, our Lord!

He was conceived by the power of the Holy Spirit, and born of the Virgin Mary!

He suffered under Pontius Pilate, was crucified, died, and was buried, He descended to the dead!

On the third day he rose again!

He ascended into heaven, and is seated at the right hand of the Father!

He will come again to judge the living and the dead!

I believe in the Holy Spirit, The holy Catholic Church, The communion of saints, the forgiveness of sins, the resurrection of the body, and the life everlasting!

Amen!”

Sacraments: Christians celebrate the saving power in the form of Sacraments. They listen to Christ through reading of the gospels and meet him in the poor as well as needy. Therefore, Sacraments are considered as the symbolic actions introduced by Christ to allow his disciples to establish deeper spiritual union with him. Baptism and Eucharist are the two sacraments followed by all Christian churches. However, Confirmation, Reconciliation, Anointing of the sick, Marriage and Ordination to clerical ministry are also accepted by The Roman Catholic Church and Eastern Orthodox churches. The word ‘**Baptism**’ is derived from the Greek word ‘*baptizein*’ which means to wash or to cleanse. The Baptism is the Christian initiation ceremony which symbolizes the person once for all as a member of Christ in his church. The term ‘**Eucharist**,’ which comes from the Greek word ‘*eucharistia*,’ signifies thanksgiving. The Eucharist represents the key act of worship across all denominations, also referred to as the Holy Mass, Holy Communion, or the Lord’s Supper. While most denominations observe it on Sundays, the Roman Catholic Church conducts the celebration daily. From a **communitarian** perspective, Christianity views the individual as fundamentally part of a community and emphasizes that one does not exist in isolation. Personal well-being and salvation cannot be attained in solitude. In Christian belief, salvation entails a commitment to fostering genuine human solidarity and nurturing deep connections among individuals. Christianity is recognized as a religion centered on community. The church is regarded as the mother and the teacher, or *mater et magistra*, of the Christian way of life and its practices.

Divisions within Christianity: The various divisions in Christianity are viewed by most mainline churches as heterodox. The Great Schism, considered the first significant split in Christianity, occurred in 1054. This division resulted in the formation of two distinct Churches: the Western Church and the Eastern Church. The Eastern Church is referred to as the Orthodox Church, while the Western Church continues to be called the Roman Catholic Church. The Eastern Church rejected the Pope’s central authority over Universal Christianity and subsequently fragmented into several sub-groups. In the sixteenth century, the Protestant Reformers – Martin Luther and John Calvin, distanced themselves from the Roman Catholic Church and established the Lutheran and Calvinist traditions. The English Church chose to distance itself from the Pope’s central authority, leading to the establishment of the Anglican Church, which later fragmented into numerous Christian denominations and sects. In contemporary times, the Roman Catholic Church is maintaining its status as the largest Christian denomination both in terms of numbers and its extensive influence.

Check Your Progress (CYP)–II

Based on the understanding of the previous section, answer these questions in your own words:

Q1. Discuss the concept of God in Christianity.

Q2. Write a short note on the important principals followed by the Christian faith.

Q3. Fill in the blanks.

- (i) _____ is regarded as the mother and the teacher of the Christian way of life.
- (ii) The term _____ signifies thanksgiving.
- (iii) The word _____ means to wash or to cleanse.
- (iv) _____ Church rejected the Pope's central authority over Universal Christianity.
- (v) The Eastern Church is referred to as the _____.

20.4 LET US SUM UP

Christianity is one of the world's three major monotheistic religions on the life and teachings of Jesus Christ, whom Christians believe is the Messiah (the Son of God) sent to redeem humanity from sin and death. Christianity began as a 1st century CE sect of Judaism, and therefore the Holy Scriptures of Christians contains both the Old Testament (as used by Jews) and the New Testament, which contains writings about Jesus (including his birth, ministry, crucifixion, and resurrection), as well as information about the early development of the Christian Church.

Through missionary efforts (primarily by Paul the Apostle), early Christianity spread quickly, developed into a distinct theologically-based religion, and eventually became established as the official religion of the Roman Empire under Emperor Constantine. By the fourth century CE, Christianity had become the leading religion in Europe.

As time went on, differences in doctrine and politics caused major rifts within Christianity. The first major rift was the formation of the Eastern Orthodox Church and the Roman Catholic Church. Later, in the 1500s, reform movements that included significant leaders as Martin Luther resulted in the emergence of Protestantism that promoted scripture, faith, and reforms in the practice of Christianity.

As the world's largest religion, Christianity teaches many beliefs including that there is only one God, that Jesus saves humanity, that one must be morally upright, and that all Christians have the hope of eternal life. Today,

Christians can be found in all parts of the earth influencing such aspects of history, culture, philosophy, art and social institutions. Because of the various denominations within Christianity, there is wide variation among the congregations in their theological expression, practice, and tradition, depending on what part of the world they are located and when they existed.

20.5 GLOSSARY

Trinity: The usual way of describing God as three persons in one Godhead: the Father, the Son, and the Holy Spirit.

Crucifixion: The manner in which Jesus was put to death.

Resurrection: Arise of Jesus from the dead on the third day after his crucifixion.

Apostle: The early followers of Jesus Christ.

20.6 EXAMINATION ORIENTED QUESTIONS

- Q1. Explain the life of Jesus and establishment of Christianity as a different faith.
- Q2. Examine the position of Bible in the Christianity.
- Q3. Discuss the important religious practices followed by the Christians.

20.7 LESSON END EXERCISES

- Q1. Describe the religious faith of Christianity.
- Q2. Critically evaluate the life of Jesus.

20.8 ANSWER KEY

CYP-I

- Q1. Refer section 20.2
- Q2. Refer section 20.2
- Q3. (i) Jesus (ii) Nazareth (iii) Baptism (iv) Yeshua (v) Bethlehem

CYP-II

- Q1. Refer sub-section 20.3.1
- Q2. Refer sub-section 20.3.4
- Q3. (i) The church (ii) Eucharist (iii) Christos (iv) The Eastern (v) Orthodox Church

20.9 SUGGESTED READINGS

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RELIGIOUS DEVELOPMENT

SEMESTER-I

COURSE NO. : HIST104

UNIT : IV

LESSON : 21

ISLAM

STRUCTURE

21.0 Learning Objectives and Outcomes

21.1 Introduction

21.2 Islam: Understanding the Religion

21.2.1 Muhammad

21.2.2 Muhammad: Prophethood

21.3 Islam: Philosophy

21.3.1 TheGod

21.3.2 Islam: Important Beliefs

21.3.3 Quran

21.3.4 Five Pillars

21.4 Let us sum up

21.5 Glossary

21.6 Examination Oriented Questions

21.7 Lesson End Exercises

21.8 Answer Key

21.9 Suggested Readings

21.0 LEARNING OBJECTIVES AND OUTCOMES

Learning Objectives

The objective of this lesson is to enable you to:

- explain the origin and faith of Islam.
- evaluate the historical journey of Mohammad.
- examine the core foundations of Islam.
- identify the basic belief system of Islam practiced across the globe.

Learning Outcomes

After going through the lesson, you will have a clear understanding about:

- the origin and historical journey of Islam.
- the life and prophethood of Muhammad.
- the important philosophical concepts in Islam.
- the idea of Divine Revelation in Islamic faith.

21.1 INTRODUCTION

Dear learner, the religion of Islam is based on submission to the will of God, which is reflected in the very definition of the word Islam. “Islam” is derived from the Arabic verb “s-l-m,” which translates to “peace” or “submission.” The five pillars of Islam are the declaration of faith (Shahada), performance of daily ritual prayers (Salat) five times a day, giving to those in need (Zakat), fasting during the month of Ramadan (Sawm), and going on a pilgrimage to Mecca (Hajj) to do as Muhammad did and go to the sacred Kaaba. These five pillars form the structure of religious life and provide Muslims with spiritual discipline, community identity, and moral obligation.

Throughout its history, Islam has spread quickly beyond the borders of Arabia. It spread through trade, cultural exchange, and conquest. Within a century after Muhammad died in 632 CE, the Islamic civilization had stretched from the Middle East to North Africa and parts of Europe and Asia. The city of Medina was the first organized Muslim community and became the center of the early Islamic state. As Islamic civilization has continued to grow, it has made significant contributions to many areas of human knowledge, such as philosophy, science, medicine, mathematics, art, and architecture, and has influenced both Eastern and Western thought.

The principles that underpin Islam are based on notions of justice, mercy, equity, and accountability within a society; thus, they serve as means for Muslims to carry out their responsibility towards one another, as parents/guardians of children, family members, and fellow human beings. All Muslims are required to follow a certain path while trying to achieve unity through religious observance and adherence to the same values of the Qur’an and the Sunnah.

21.2 ISLAM: UNDERSTANDING THE RELIGION

In the 19th century BCE, Abraham encountered a new deity and turned away from the idols his family worshiped. This was seen as a significant milestone in the progression of religion. Adam is regarded as the first prophet, while

Noah played a key role in reviving faith during his era. By the time of Abraham, the worship of a single God had become distorted, making Abraham's role particularly crucial.

In Judaism, Christianity, and Islam, Abraham is viewed as the friend of God and the patriarch of the faithful. Each faith offers a different interpretation of Abraham, but all recognize that salvation begins with him. The Arabs and Israelites are thought to share a common ancestor, Abraham, stemming from his wife Sarah and their son Isaac, as well as from his other wife Hagar and her son Ishmael.

It is believed that God established a covenant with Abraham, assuring him that his offspring would be abundant and fortunate. His wife Sarah, being advanced in age, expressed doubt. Consequently, Abraham had a child with her Egyptian servant Hagar, who bore the child named Ishmael. Eventually, a miracle occurred, and Sarah gave birth to a son named Isaac. However, due to jealousy and concern over competition between the children, Sarah sent Hagar and Ishmael away. Nevertheless, God safeguarded them and supplied water for their survival in the desert. Ishmael married an Egyptian woman and had twelve sons. During the burial of their father, Abraham's both sons came together.

The tale of Abraham's covenant has influenced the historical trajectory of the Middle East and helps clarify the enduring conflict between Jews and Muslims. While Jews rejected Muhammad as the Messiah, Muslims view early prophets such as Abraham, Moses, and Jesus as part of their faith.

21.2.1 Muhammad

Muhammad ibn Abdullah was born in Mecca around 570 CE. He was a member of the Quraysh tribe and the Banu Hashim clan. His father passed away before his birth, and his mother died when he was six years old. His upbringing was overseen by his grandfather and later by his uncle Abu Talib. During his childhood, he was surrounded by traders, caravans, and the bustling environment of Mecca. His honesty and admirable character earned him great respect. A wealthy widow named Khadija became interested in Muhammad because of his growing reputation and employed him to oversee her trading business. Muhammad dedicated himself to the role and demonstrated exceptional financial management skills and leadership, successfully elevating the business to new heights. Khadija got married to him later.

At the age of forty, Muhammad underwent a transformative experience known as 'The Night of Power.' While he was meditating in the cave on Mount Hira during Ramadan, he heard a commanding voice from the angel Gabriel saying, "Recite in the name of your Lord who created man from a clinging substance!" He hurried to his wife Khadija to share what had happened, and she became his first follower. Subsequently, his cousin Waraka Zaid and his friend Abu Bakr also embraced his message. Gabriel continued to disclose Allah's words to him, and Muhammad memorized these messages to share with others. He recorded these revelations on various materials such as stone, leather, leaves, and bones. Muhammad lived his life as a husband and as well as father, balancing spiritual duty with family life and followed the example of earlier prophets Moses and Abraham.

21.2.2 Muhammad: Prophethood

The core concept of Islam revolves around the humanity of Muhammad. He is seen as neither divine nor merely a representative of God on earth. He sought forgiveness from Allah, and Allah admonished him for focusing too much on teaching the Quran. Nevertheless, Muhammad was chosen as the ultimate messenger and regarded as more than an ordinary person. The earlier prophets – Moses received revelations through the Torah, David through the Psalms, and Jesus through the Gospel. Likewise, Muhammad received revelations in the form of the Quran, which is referred to as the ‘standing miracle’ of Islam. This text is viewed as a testament to Muhammad’s sincerity and his absolute faith in God.

‘Night Journey to Heaven’ was a significant event in Muhammad’s life, during which he was transported from Mecca to Jerusalem and subsequently ascended to the seventh heaven. In this place, he encountered earlier prophets like Moses and Abraham, who bestowed upon him a vision of Allah. This event in Muhammad’s life established the foundation for one of Islam’s core practices – praying five times a day. The Dome of the Rock in Jerusalem is regarded as a symbol of this profound journey of Muhammad.

In Islam, Jesus is recognized as one of many prophets, with Muhammad serving as the final prophet of God, thus completing this prophetic lineage. Consequently, Muhammad is referred to as the ‘Seal of the Prophets’ because he sealed the line of Prophethood forever.

Check Your Progress (CYP)–I

Based on the understanding of the previous section, answer these questions in your own words:

Q1. Discuss the early life of Muhammad.

Q2. Write a short note on the Prophethood of Muhammad.

Q3. Fill in the blanks.

(i) The Dome of the Rock in Jerusalem is regarded as a symbol of the profound journey of Muhammad from _____ to Jerusalem.

- (ii) While Muhammad was meditating in the cave on Mount Hira during Ramadan, he heard a commanding voice from_____.
- (iii) Muhammad was a member of _____ tribe.
- (iv) Muhammad was a member of _____ clan.
- (v) Muhammad is referred to as the ‘Seal of the Prophets’ because he sealed the line of _____ forever.

21.3 ISLAM: PHILOSOPHY

Islam is rooted in the concept of *Tawhid* i.e. absolute unity of God, which forms the foundation of Islamic thought. According to this concept there is only one God i.e. Allah. Allah is considered to be omnipotent, omniscient, and the most merciful. Its strict monotheism shapes not only theology but also ethics, law, and social organization. The philosophy of Islam is derived from the Qur’an, and the traditions of the Prophet Muhammad i.e. *Hadith*. A major development in Islamic philosophy was seen after its interaction with Greek thought. The translations of works by Aristotle and Plato led to the flourishing of *Falsafa* (Islamic philosophy) during the Abbasid period.

The Islamic philosophy promotes justice (*adl*), compassion, and accountability. The concept of the *Ummah* (community) provides the concept of collective responsibility and social justice. This shaped the political and legal thought and helped in the development of *Sharia* (Islamic law). The philosophy of Islam represents a rich and dynamic tradition that integrates faith, reason, and spirituality.

21.3.1 The God

The first part of the Shahada states that there is no deity except for God. The Quran provides a thorough explanation of the concept of God within Islam. In Islam, the belief in God is characterized as monotheistic and singular. According to Islamic teachings, God is eternal, absolute, self-sufficient, and does not have any partners in the act of creation. It is believed in Islam that God cannot be divided or take on a human form. However, Allah is known by many names, and the Quran mentions ninety-nine beautiful names for God. The concept of God’s unity reflects the notion of the unity of humankind. Since God is one, all human beings are viewed as interconnected as if they are siblings.

21.3.2 Islam: Important Beliefs

Tawhid, which signifies the oneness of God, serves as the cornerstone of Islam. It refers to the concept that Allah is unique, the most compassionate, the most powerful, the creator of the universe, and the ultimate judge.

As a result, the declaration of faith, ‘La ilaha illa Allah, wa Muhammad rasul Allah’ – meaning there is no deity but Allah, and Muhammad is His messenger – establishes the fundamental principle of Islam, which is the unwavering belief in one God.

The Kalima encompasses the six fundamental articles of faith in Islam: Belief in One God, or Tawhid; Belief in Angels; Belief in the Quran; Belief in the Prophets; Belief in the Last Day, and Belief in Predestination.

21.3.3 The Quran

The Quran holds a pivotal role in Islam. Its verses are recited during daily prayers, Friday congregational services, and significant life events such as births, weddings, and funerals. It acts as a guide for every Muslim's life. The Quran was finalized in its complete form within twenty-eight years following Muhammad's death during Caliph Uthman's rule, becoming the official version. It consists of 114 suras, or chapters, with 'The Cow' being the longest among them. The shortest chapter consists of just three verses, or ayat. A key theme of the Quran is to convey the oneness and unity of God, the mercy and compassion of God, the authenticity of Muhammad as God's messenger, the consistency of God's message through earlier prophets like Adam and Jesus, human responsibility for their actions, moral and ethical guidance for both personal and social conduct, as well as the resurrection, final judgment, and life after death.

21.3.4 Five Pillars

Islam prescribed certain religious duties and practices called the Five Pillars of Islam – Shahadah i.e. Witness, Salah i.e. Prayer, Sawm i.e. Fasting, Zakat i.e. Almsgiving, and Hajj i.e. Pilgrimage.

- (i) The Shahadah: 'There is no deity but Allah, and Muhammad is His Messenger.' This proclamation is recognized as the first pillar of Islam, serving as the cornerstone for all other beliefs and practices within the religion. Repeating this statement reinforces both the spiritual and moral journey of a Muslim, and accepting it is sufficient to embrace Islam. Every Muslim recites the Shahadah in their daily prayers and during significant events throughout their lives, from birth to death. The Shahadah is associated with five fundamental beliefs: belief in one God, belief in angels, belief in the holy scriptures revealed by God, belief in the prophets, and belief in the Day of Judgment and Resurrection.
- (ii) Salah: Salah, also known as Salat, is recognized as the second pillar of Islam. Its literal interpretation is to worship, and the core activity involved is prayer. This worship takes a specific form with established bodily movements and recitations from the Quran in Arabic, which follow a ritual washing known as 'wudu.' It is to be performed five times throughout the day—at dawn, midday, mid-afternoon, sunset, and nighttime. The 'adhan,' or call to prayer, is announced by a 'muezzin,' who serves as the public caller, and it is preferable for Muslims to gather in a mosque for prayer. The prayer consists of 'rakat,' which includes various physical postures: standing, bowing, prostrating, kneeling, and sitting. A specific number of 'rakat' must be completed – two at dawn, three at sunset, and four at the any other times. On every Friday, the noon prayer is performed in group which is led by an imam.
- (iii) Sawm: Sawm represents the third pillar of Islam. This practice is primarily conducted during the month of Ramadan. The Quran states that fasting serves as a means of self-purification and submission to God. The fast encompasses two key aspects – first, it requires the abstention from food, drink, sexual relations, gambling, music, and other pleasures, as well as from negative thoughts and desires, from dawn until dusk. Secondly, fasting fosters a sense of gratitude for God's blessings and compassion for those who are less fortunate.

- (iv) Zakat: The fourth pillar of Islam, known as Zakat, emphasizes the importance of social justice within the faith. Zakat functions as a structured charity and welfare system aimed at aiding those in need within the community. It is obligatory for all Muslims to contribute 2.5% of their yearly savings to support the underprivileged in society. The relationship among the three pillars of Islam is expressed as follows: ‘Prayer takes us partway to God; fasting leads us to His entrance; almsgiving paves the way to His presence.’
- (v) Hajj: Hajj, the fifth pillar of Islam, represents the ultimate spiritual experience in a Muslim’s life. Every Muslim is required to make a pilgrimage to Mecca at least once in their lifetime. This event embodies both dedication and equality, as countless Muslims from around the world, regardless of their nationality, race, or social status, don simple white garments and participate in the same rituals together.

Check Your Progress (CYP) –II

Based on the understanding of the previous section, answer these questions in your own words:

Q1. Discuss the important beliefs in Islam.

Q2. Write a short note on the concept of Zakat i.e. Almsgiving in Islam.

Q3. Fill in the blanks.

- (i) The shortest chapter of Quran consists of just _____ verses, or ayat.
- (ii) Salah follows a ritual washing known as _____.
- (iii) Sawm is primarily conducted during the month of_____.
- (iv) _____ emphasises the importance of social justice within the faith.
- (v) _____ represents the ultimate spiritual experience in a Muslim’s life.

21.4 LET US SUM UP

Islam is a world religion which emerged in the 7th Century A.D. in Arabia, based on Prophet Muhammad's teaching, that Muslims believe were received from God (Allah) in the form of divine disclosures (divinely inspired messages). These divine disclosures were compiled to form the Qur'an. The Qur'an is viewed as the literal word of God and as the main text of Islam.

Islam teaches about the oneness of God – the concept of tawhid, and that all people should submit to the will of Allah. Muslims express their faith through 5 Pillars: the declaration of faith (Shahada), praying 5 times a day (Salat), giving to the poor (Zakat), fasting during the month of Ramadan (Sawm), and going to Mecca for the Hajj pilgrimage (Hajj). Islam also records that in 622 A.D., Muhammad and many of his followers migrated from Mecca to Medina – the event called Hijra – which marks the beginning of the Islamic calendar.

The passing of Muhammad saw the leadership of the Muslim Community transferring from him to the caliphs and the emergence of an Islamic Empire that encompassed all of the Middle East, North Africa, and a portion of Europe and Asia. During the ensuing years, much of the Islamic Empire further divided into two main sects (Sunni & Shia) with most sectarian differences deriving from how leaders were chosen and differing interpretations of who has religious authority.

The religion of Islam has had a profound impact on world history, having influenced the development of various areas in law, philosophy, sciences/technology, trade and culture. Today it is one of the largest religions in the world and has impacted the spiritual and social lives of billions of people in very diverse societies worldwide.

21.5 GLOSSARY

Qur'an: The central sacred scripture of Islam.

Hijra: The migration of Prophet Muhammad and his followers from Mecca to Medina.

Caliphate: The political-religious leadership established after Muhammad's death.

21.6 EXAMINATION ORIENTED QUESTIONS

- Q1. Examine the life of Muhammad and his role in the establishment of Islam.
- Q2. Explain the Quran as a guiding text of every Muslim.
- Q3. Discuss the five pillar of Islam.

21.7 LESSON END EXERCISES

- Q1. Describe the teachings of Islam.
- Q2. Examine the Islam as a religion.

21.8 ANSWER KEY

CYP-I

- Q1. Refer sub-section 21.2.1
- Q2. Refer sub-section 21.2.2
- Q3. (i) Mecca (ii) the angel Gabriel (iii) the Quraysh (iv) the Banu Hashim (v) prophethood

CYP-II

- Q1. Refer sub-section 21.3.2
- Q2. Refer sub-section 21.3.4
- Q3. (i) three (ii) wudu (iii) Ramadan (iv) Zakat (v) Hajj

21.9 SUGGESTED READINGS

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