

GOVERNMENT OF TAMIL NADU

SOCIAL SCIENCE

IX-STANDARD

Untouchability Inhuman - Crime

Department of School Education

A publication under
Government of Tamilnadu
Distribution of Free Textbook Programme
(NOT FOR SALE)

© Government of Tamil Nadu

First Edition - 2011 Revised Edition - 2012

(This Book is published under Uniform system of School Education Scheme)

Chairpersons

History & Civics

listory & civics

Geography & Economics

Dr. Karunanandhan

Professor of History (Retd), Vivekanandha College, Mylapore, Chennai - 600 004.

Dr. R. Bhavani,

Associate Professor, Queen Mary's College, Mylapore, Chennai- 600 004.

Reviewers

Thiru. D. Abul Fazal,

Assistant Professor, Islamiah College, Vaniyambadi, Vellore District.

Tmt. G. Geetha.

Assistant Professor, Queen Mary's College, Mylapore, Chennai- 600 004.

Tmt. D.S. Karunyam,

P.G. Assistant, LFC Girls Hr. Sec. School, Ranipet, Vellore District.

Dr. M. Rangaraj,

Principal, Christ College of Education, Santhavellore, Kancheepuram District.

Tmt. Baby,

PG. Assistant, KAKM Municipal Hr. Sec. School, Vellore.

Authors

Tmt. R. Geetha.

Assistant Professor, Queen Mary's College, Mylapore, Chennai- 600 004.

Lt. R. Selvi,

Assistant Professor, Quaid-E-Millath College for Women, Chennai-600 002.

N. Hemavathy,

PG. Asst, Dr. BMS Mat. Hr. Sec. School, Shenoy Nagar, Chennai - 600 030.

V. Sabash Kumar,

B.T. Assistant, Doveton Corrie A.I. Boys Hr. Sec. School, Vepery, Chennai-600 007.

Tmt. P. Geetha.

BT Assistant, Vidhyodhaya Mat. Hr.Sec.School, T. Nagar, Chennai-600 017.

Tmt. T. Vijayakumari,

PG Assistant, Prince Mat. Hr. Sec. School, Madipakkam, Chennai-600 094.

Tmt. S. Anusuya Devi,

PG. Asst. Economics, Govt. Boys Hr . Sec. School, Uthiramerur, Kancheepuram District.

Laser Typeset: R. Chamundeswari, S. Sarath Chandiran Layout: N. Selvamani Wrapper: N. Selvamani Illustration: N. selvamani, M.Karthikeyan

Textbook Printing Tamilnadu Textbook Corporation, College Road, Chennai-6.

College Road, Cheffial-

Price: Rs.

This book has been printed on 80 G.S.M. Maplitho Paper

Printed by Web offset at:

SI.No CHAPTER		Page. No.					
HISTORY							
1.	Ancient Civilizations	1					
2.	Intellectual Awakening of 6th Century B.C	19					
3.	Mediaeval Age	28					
4.	Beginning of Modern Age	40					
5.	The Industrial Revolution	54					
6.	The French Revolution (1789)	61					
7.	Cultural Heritage of Tamil Nadu	70					
	GEOGRAPHY						
1.	Tamil Nadu	77					
2.	Physiography of Tamil Nadu	82					
3.	Climate of Tamil Nadu	89					
4.	Resources of Tamil Nadu	99					
5.	Tamil Nadu - Agriculture	114					
6.	Tamil Nadu - Manufacturing Industries	127					
7.	Tamil Nadu - Transport and Communications	138					
8.	Tamil Nadu - Trade	149					
9.	Tamil Nadu - Population	153					
10.	Environmental Issues	160					
11.	Conservation of Resources and Sustainable Development	169					

SI.I	CHAPTER	Page. No.					
CIVICS							
1.	The Union Government	179					
2.	The State Government	192					
3.	Rights and Duties of Citizens	199					
4.	Contemporary Social Issues of Tamil Nadu	204					
ECONOMICS							
1.	Demand and Supply	215					
2.	Equilibrium Price	218					

HISTORY

1. ANCIENT CIVILIZATIONS

The history of the human race covers the entire period since man first appeared on earth. By about 4000 BC the accumulated knowledge and skills of the preceding thousands of years, combined with new discoveries of metals enabled man to live in urban societies. The emergence of this stage was a revolution in human history known as the metal age revolution. It led to the emergence of the first civilizations which are known as River Valley Civilizations. Such river valley civilizations were noted for the effective use of metal implements for Cultivation, weapons and domestic use.

The Bronze Age civilizations which flourished in different parts of the world between 5000 BC and 500 BC were

- The Indus Valley civilization or the Harappan culture 3250 to 2750 BC.
- The Tigris Euphrates civilization of Mesopotamia, the modern Iraq (3500 BC to 1000 BC)
- 3. The Nile Valley Civilization in Egypt (4000 500BC)
- The Hwang –Ho or the Yellow River civilization in China (3500-3000 BC)

The Nile Valley Civilization of Egypt

Among the four civilizations of the Bronze Age, the civilization of Egypt which flourished in the valley of the Nile, is believed to be the oldest of which systematic records are available. The archaeologists were able to find huge pyramids, the mysterious sphinx, ruins of temples and tombs, furniture

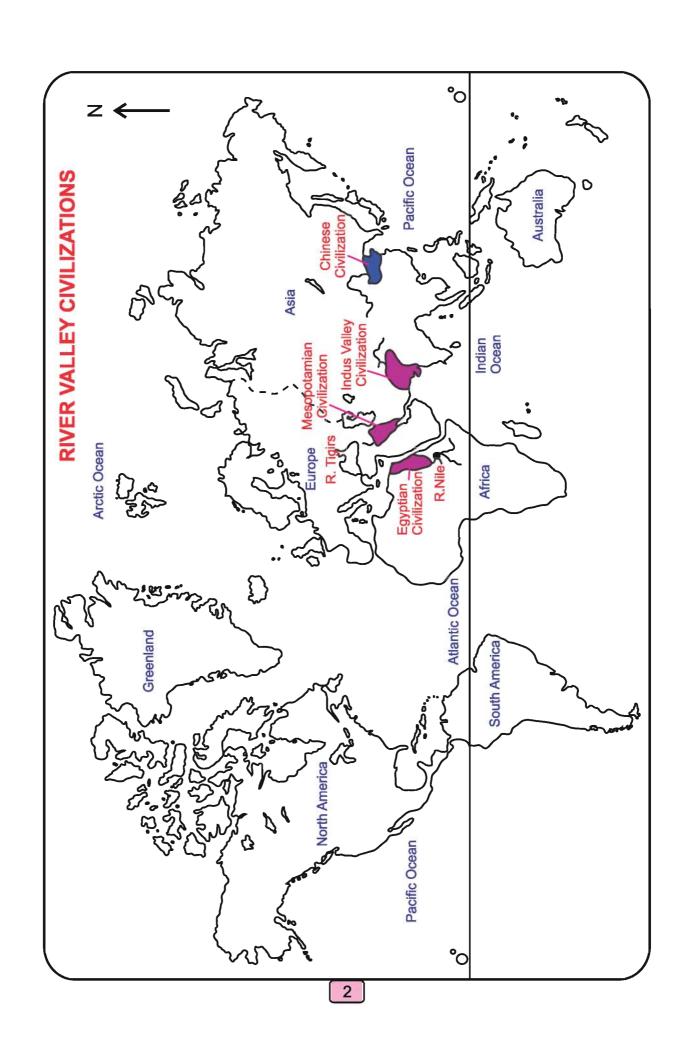
and clothing and even well preserved human bodies (Mummies). Egypt is known as the "daughter of Nile". Herodotus, the greek historian aptly called Egypt, "the gift of Nile" The Egyptian civilization was at its pinnacle of glory about 5000 years ago.

Political Condition

The people of ancient Egypt consisted of various tribes. The innumerable tribal chieftains (Nomes) were gradually merged into two kingdoms under strong kings. Later on entire Egypt was united under one Pharaoh. The Pharaohs were absolute monarchs. The kings were believed to have descended from Sun God. They lived in great luxury. The Pharaoh was the chief justice, chief priest and chief commander. After his death his body was preserved in the form of 'Mummy'. He had the power to declare wars and make treaties. The foremost among Egyptian kings of this period were Thutmose I, and Thutmose III. Emperor Thutmose III was known as the "Napolean of Egypt".

Socio - Economic Condition

The Egyptian society was composed of three classes namely the aristocracy, the middle class and the slaves. The slaves were forced to work for the construction of pyramids, temples, canals and dams. Generally speaking, the king and his lords were at the top in the social ladder. The priests and the nobles formed a privileged class. They lived a life of comfort. Merchants, artisans, small land owners formed the middle class of the society.



The position of women was a unique one. They practiced monogamy and endogamy.

Agriculture was the main occupation. They introduced the process of irrigation by digging canals in basins. They knew the art of making several articles of metal particularly of bronze. Ship-building became an important trade, along with pottery and cloth weaving. Both internal and external trade were highly developed. Their main means of transport was navigation in the river Nile and the sea.

Contribution of Egyptian Civilization Religion

Religion dominated the political, economic, intellectual and social life of the Egyptians. The ancient Egyptians practiced polytheism. Their principal god was the Sun God. Amon or Aton or Ra; the other important gods and goddesses were Osiris, Isis and Horus. The images of these gods were carved out of big stones. They were shaped as partly human and partly animal. They believed that man would have a resurrected life, and a trial by God. This religious belief inspired them to mummify their corpses and to construct pyramids (Tombs of the Pharaohs) to preserve dead bodies. The great pyramid of Gizeh built for the Pharaoh Cheops (Khufu) is 481 feet high.



Pyramid of Gizeh

The preserved and embalmed dead body inside the tomb was called mummy. The mummy was placed in a wooden coffin and it was sealed in a stone box called Sarcophagus.



The Mummy case

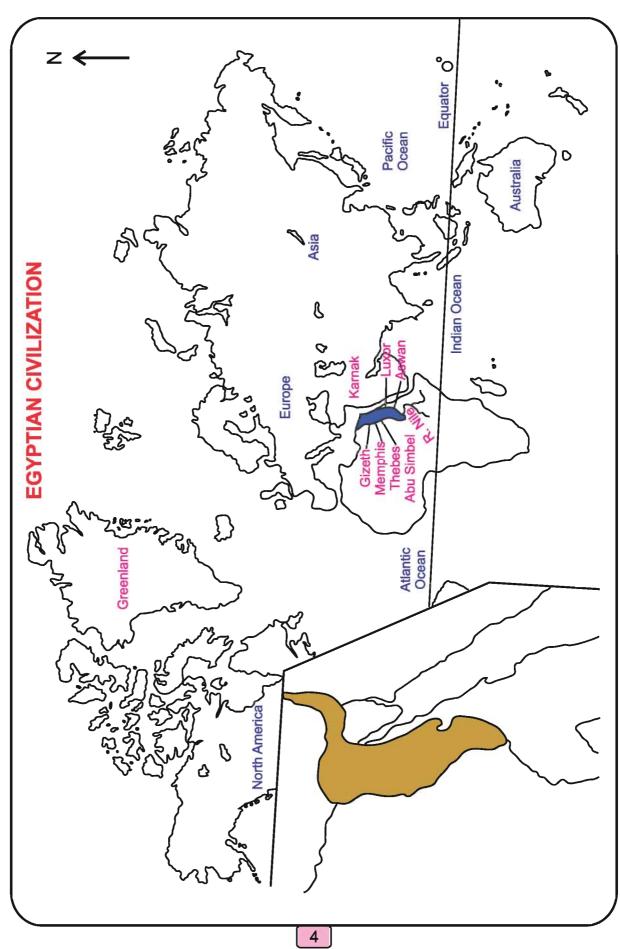
In order to make the journey of the Pharaoh to the next world comfortable, food, clothing and furniture were placed inside the tomb. Pharoah Amenhotep IV, popularly known as Akhnaton enforced monotheism, with Aton as the only god to be worshited by people. He also declared himself against wars.

Art and Architecture

Egypt was the earliest home of art, architecture and sculpture. The pyramids and the sphinx are the most



The Sphinx



beautiful and wonderful specimens of their architecture and art. The sphinx is a mythological animal with the head of a man and body of a lion.

The Greek historian and the father of history Herodotus wrote that 30,000 men worked for 20 years to complete the structure of the pyramid of Pharoah Cheops (Khufu) at Gizeh. It is regarded as one of the seven wonders of the ancient world. The temple at Karnak is a fine monument.



The Kamak Temple

The most attractive part of the temple of Karnak is its column hall with the length of 170 feet and breadth of 138 feet.

Writing

The ancient writing of Egypt was known as Hieroglyphics. Hieroglyphic a Greek word, meant Holy picture. They first used a system of pictographs. There were more than 2000 pictograph symbols. Writing materials consisted of papyrus, reed pen, ink and ink pot.

Egyptian literatures are predominantly religious in nature which included book of 'the dead' and 'coffin texts'. They also discovered the secrets of eclipses, movements of planets and prepared solar calendar. They calculated the days between floods in Nile and fixed solar year with 365 days. The cycle of Zodiac is a gift of

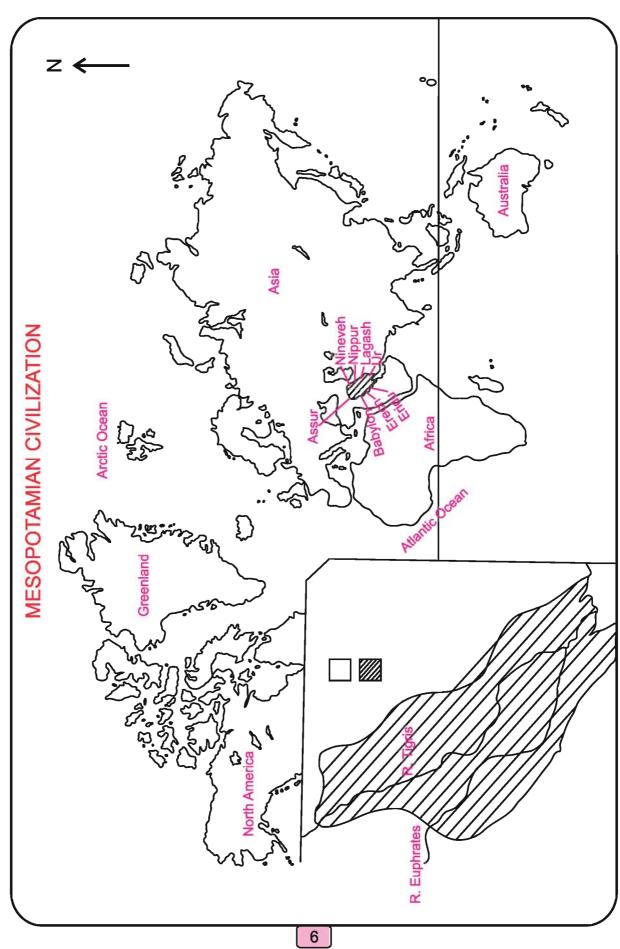
Egyptians to the science of Astronomy and Astrology. They prepared star tables. Tremendous progress in the field of medicine and surgery were made. They were the first to introduce a decimal system and to develop geometry.

Trade and Commerce

Agriculture was the main occupation of the Egyptians. The Nile Valley became the centre of great economic activity. They carried on trade in ivory, gold, ebony, ostrich feathers and slaves with Nubia and Sudan. They imported spices, scents, colours, fine cloth and sandal from India. They learnt the art of making jewellery, glassware and furniture. The world is deeply indebted to them not only for their contribution to the civilization but also for their art and crafts. Thus Egypt made several unique and valuable contributions to the world.

Mesopotamian Civilization

The great Mesopotamian civilization comprises the Sumerian, Babylonian and Assyrian cultures. This civilization flourished in a region between two rivers, i.e. Euphrates and Tigris, hence the name Mesopotamia (meso - in between , potam - rivers; i.e. the land between two rivers). Both the rivers, the Euphrates 2760 kms long and the Tigris 2000 km long, have their source in the mountains of Armenia. The valley between these two rivers is in the shape of crescent and the region is fertile, hence is known as the 'fertile crescent'. The Garden of Eden mentioned in the Old Testament of the Bible was believed to have been situated within this region. The fertility of the soil and availability of water



attracted many tribes to this region. The peculiar feature of the Mesopotamian civilization was its complex character.

Political Life

The word Sumerian means black headed. The historians tell us that they did not belong to the Aryan or the Semitic race. They settled in the southern part of Mesopotamia near the Persian Gulf. They adopted city state type of government. Sumer was their chief city state, so they were called Sumerians. Their city states were governed by patesis (Priest Kings). The most important city-states were Ur, Larsa, Kish, Lagas Eridu and Ammon. They had no physical barriers to prevent immigrations. So their kingdom was conquered by the semitic king of Akkad, Saragon I.

Bab—Ilu was made the capital of Amorite by king SUMMUABU, and their city became popular as Babylon. Amorites were called Babylonians and their powerful king was Hammurabi. His reign witnessed all round prosperity and was sometimes described as the golden age of Mesopotamia. Later on Assyrians conquered Mesopotamia. They were cruel and believed in terror activities. The chief centres of Assyrian power were Assur and Nineveh. Later on they were conquered by the Chaldeans. The Chaldean empire reached the zenith of its prosperity



Hanging Garden of Babylon

during the reign by Nebuchad nezzar. He built the famous "Hanging Garden", which is considered as one of the wonders of the ancient world. As a result of the joint contribution of the Sumerians, the Babylonians and the Assyrians, there flourished a great civilization in Mesopotamia for long time.

Social Life

The society was divided into three strata, the farmers, labourers and the slaves. The social regulation was based on religion. The temples were the centres of education. Women had a honoured position. Agriculture was highly developed. They carried trade with Indus and Nile Valley people. The Babylonian merchants carried on commerce by barter at first, and the city of Babylon became the centre of the international commerce.

Cuneiform Script

The Sumerians evolved a system of writing with wedge shaped letters called cuneiform. They wrote on wet clay tablets. They were then baked or dried. A large number of these clay tablets have been found. They used nearly 350 signs. Their writings were from right to left. Most of the books of this period described gods and their activities. One of the most famous of these is the Epic of Gilgamesh.



Cuneiform Script

Science and Astronomy

The science, especially astronomy and medicine had made astonishing progress. Sun dials and water clocks were used to measure time. They made use of a Lunar calendar of 365 days divided into 12 months. They divided the circle into 360 degrees (60 x 6). The ziggurat or towered building also served as an observatory. The Sumerians knew planets like Jupiter, Venus, Saturn and Mars. Ancient Chaldean astronomers Naburi and Kidinnu made many contributions to the science of astronomy.

They adopted units of sixty to count time. The Sumerians mostly used Sexagesimal system of counting. The concept of seven days constituting a week also goes back to the days of Chaldeans.

Religion

Religion played an important role. Their chief god was Marduk and his queen Nanshe. Ishta the mother of the gods possessed control over reproduction among plants and beasts. The Gods named Shamash, Nannar and Tammuz were worshiped by them. The tower temples known as Ziggurats were built by them. Their sculptures were inferior to those of the Egyptians.

Code of Hammurabi



Hammurabi Code

Hammurabi was the greatest of the Babylonian rulers. He is famous in history as a warrior, conqueror, administrator and builder. The code of Hammurabi is the first written code of laws known to history. This had earned Hammurabi the title "The world's first Law giver". The code covered almost all aspects of man's life, for example debt, marriage, divorce, property, payment of taxes etc., The Laws were engraved in Semitic Language of the Amorities on a piece of stone at the top of which was a scene representing Hammurabi receiving the laws from sun god. The code contained 4 parts namely a civil code, a code of procedure, a penal code and commercial code. The civil code recognized 3 classes of citizens. freemen, semi-freemen and slaves. The second part dealt with courts, rules and appointment of civil and religious judges. The penal code fixed punishment of crimes. This law based on the idea of "an eye for an eye and a tooth for a tooth" is similar to the Mosaic Law. The laws fixed prices and wages. organized trade and fixed the rate of interests. These Laws, were engraved on a tall column of 2.5m high in cuneiform script and exhibited to the public. 285 Laws were arranged in logical manner.

Art and Architecture

The Mesopotamians developed a distinct form of architecture. Arches, tombs and pillars were the notable features of their architecture.



Temple of Karnak

The tower of Babel was considered one of the wonders of the ancient world and another which finds mention in the Bible was a Ziggurat raised to the Sun God. According to one account it rose to a height of about 200m and measured about 95m wide at the base.

The early Chinese Civilization or The Hwang-Ho Valley Civilization

The Hwang-Ho is called the Yellow river because it brings the yellow alluvial soil on both sides. The civilization represents the largest unbroken chain of development known to humanity. The role of rivers Hwang-Ho, and Yang-tze Kiang are significant in shaping the culture, civilization and history of China. As the annual floods in Hwang-Ho causes much destruction to people, their possessions and agriculture, It is known as the 'sorrow of China'. The geography and topography of China had made its civilization to develop in isolation. The Chinese people belonged to the Mongol race. They have yellow complexion, short, oblique eyes, snubbed nose and black hair.

Political History of Ancient China

Fu Xi was the first known king. The Shang dynasty (1766–1122.BC) unified the territories of Yellow river. The succeeding Chou dynasty and its ruler Wu-Wang introduced many reforms, and the Chou Age is known as the classical Age of China. After the decline of Chou Dynasty China became disunited and feudal lords reigned supreme. Hence this age is known as feudal age. Shi – Huang –Ti who belonged to Chin dynasty, put an end to the feudal control.

He is remembered in history as the builder of the great wall of China, one of the wonders of the ancient world.



The Great wall of China

The Chinese honoured the teachings of great philosophers named Confucius, and Lao tze.

Socio - Economic Condition

The Chinese society was divided into the privileged and unprivileged classes. The nobility and the priests enjoyed most of the privileges in China. The life of peasants was generally miserable. Slavery and forced Labour were common features. Women were not given much freedom in the society. The system of foot binding was common among women. They had no right to property. However there was no hereditary bureaucracy in China. The officials were chosen from a class known as "Mandarin" who were selected through a series of public examinations. After the spread of Confucianism, there was marked change in the society.

The Chinese cleared and drained the Hwang-Ho basin and cultivated crops; there canal irrigation was in practice. They wove silk garments which attracted the attention of the world trade. They developed the ceramic art to a very fine manner and even now ceramic cups are called as China cups. The horse was known to them and was used in warfare.

The earliest commodities of trade in China were silk, ceramics, salt and iron. The trade was taken through the inland canals. There were guilds to protect the interest of the merchants. During this period commercial contacts with Asia, South East Asia, the Mediterranean region and South Asia were established. The popular drink "Tea" is also a gift of the ancient Chinese to the modern world.

Religion and Philosophy

Chinese believed in ancestor worship and made offerings to them. They also worshipped petty village deities and believed in the existence of good and evil sprits. To welcome the good spirits and ward off evil spirits, they used to build towers in each village and burst crackers to ward off evil spirits. They believed that a mythological dragon was protecting their land and people. The great Chinese thinker LaoTse condemned ritualistic practices, and advised people to go with nature. Confucius, the great Chinese philosopher emphasized that, moral living, discipline and duty consciousness alone would lead us to peaceful and prosperous society. Later on Buddhism was introduced and it soon became the most influential religion in China.

Chinese Script

The Chinese developed a pictographic script and later brought out many changes in it. Their writing was done on bones or tortoise shells with the help of some sharp instrument. In 2nd century A.D they invented the paper. Silk pieces were also used for writing. Ink was invented in 5th Century AD. The Chinese pencils were made of bamboo.

Some of the valuable scientific discoveries owe their origin to ancient China. Theories of Lunar and Solar eclipses were also developed. They

made some scientific inventions like the Water Mill, the Mariner compass, the gun powder and paper currency.



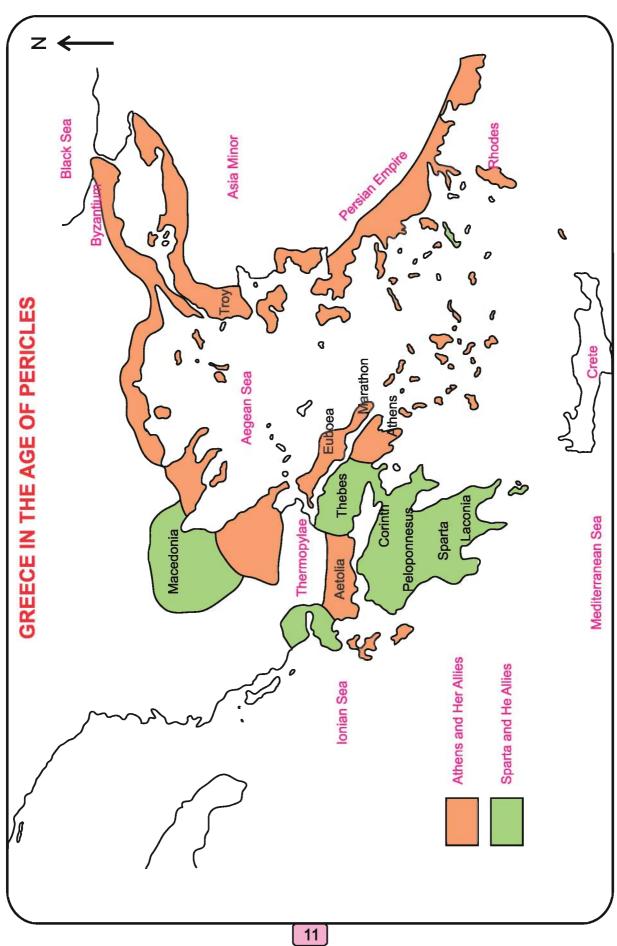
Water Mill

An anatomical study of human bodies was popular. In mathematics they introduced abacus method. One of the noblest contributions of ancient China was its art of block printing. The Chinese civilization has left an indelible mark on human progress and cultural legacy of the world.

Civilization of Europe Greek and Roman Civilization Greek Civilization

Greece is situated in the Balkan Peninsula on the south eastern part of Europe, Balkan Peninsula is separated from Asia Minor by Aegean Sea. The early Greeks came and settled in Greece in different groups as Achaeans, Ionians and Dorians. They came from the Danube River Valley. Greece is a peninsula washed by the Adriatic, the Mediterranean and the Aegean seas. The main land of Greece is full of rugged mountains. Its crisscross ranges cut up the main land into hundreds of valleys.

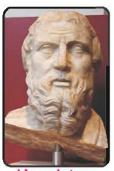
One of the significant features of Greek civilization has been their city states. Athens, Sparta, Corinth, Thebes etc. were the important city states in ancient Greece. Each of the city states



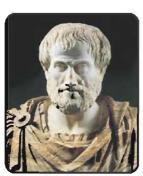
had its own government and rulers. Democratic Governments were set up. The city states often quarrelled among themselves. In the end there emerged, two powerful city states of Sparta and Athens. The Athenian democracy reached its zenith during the rule of Pericles. Ultimately the wars and conquests of Philip and Alexander of Macedonia put an end to the city states and Alexander built the first Greek Empire. As a result of this, trade developed between Europe and Asia. During the 2[™] Century BC the Romans attacked the Greeks and Greece became a part of the Roman Empire.

Contributions of Ancient Greece to World culture

Ancient Greece has contributed a lot more to the culture of the world. In the field of language and literature the contribution of Greece is unparalleled. The Iliad and Odyssey are the great epics written by a blind poet Homer. Herodotus, Thucydides and Plutarch were famous historians and biographers of ancient Greece. The most famous Greek philosophers were Socrates, Plato and Aristotle, Plato was the student of Socrates. He wrote the book "The Republic". Aristotle was a philosopher and a scientist, and he was the teacher of Alexander. Socrates is regarded as the father of Western philosophy. Herodotus is known as the 'father of history'.



Herodotus



Aristotle

The Greeks considered science and philosophy as two sides of the same coin. Hippocrates is considered as the 'father of western medicine'. Ptolemy a geographer and astronomer believed that the earth was the centre of the universe (geocentric theory). The Greek contribution to the science of Mathematics, especially to geometry was really great. Pythagoras was a great mathematician, astronomer, astrologer and philosopher.

The temples in ancient Greece especially that of Zeus in Alexandria are the best specimens of Greek art and architecture. The best example of Greek architecture is the temple dedicated to goddess Athena in Parthenon. Myron and Phidias were the famous sculptors of ancient Greece. The Greeks were pioneers in the field of sports and games too.

Since 776BC, they used to conduct Olympiad festival in every four years, this Olympiad festival is the inspiration for the International Olympics of modern times. The achievement of



Myron

ancient Greeks in the spheres of philosophy, literature, science and sports are marvellous. It is the Greeks who gave the world the idea of freedom, namely freedom of thought, speech or writing.

The Roman Civilization

The Apennine peninsula in the middle of the Mediterranean region had been the cradle of the Roman civilization. That peninsular territory is called "Italy" and the name Italy is of Greek origin. The river basins of "po" and "Tiber" were the centres of

civilizational activities. The Alps mountain ranges in the north prevent the cold polar winds from penetrating into Italy, thus provide a very pleasant climate to Italy. In fact the Roman civilization can be deemed as Italian Civilization.

In the beginning monarchical system prevailed in Italy. There were Assemblies and Senates to advise and assist the kings. In due course, kingships were given up and "republics" were established. Of these republics the Republic of Rome emerged as the most powerful one. It is believed that the city of Rome was founded in B.C. 753 by two brothers named Romulus and Rhemus. By 6th century B.C. it became a Republic. The "Senate" was the legislative wing of the Republic. In that senate the propertied and influential class known as the Patricians wielded much influence. The common people who had no property were called "Plebians". After a protracted struggle, the plebians too gained representations in the senate. The administrative powers were in the hands of three elected consuls. Theplebians later on secured recognition of their rights through codes of law. These codes engraved in slabs of woods were known as the "Laws of Twelve Tables".

Rome in the process of its expansion, had to fight three wars with the state of Carthage in North Africa. These wars were called the Punic wars and were fought between 264 BC to 146 BC. The brave Carthagenian general Hannibal was finally defeated. All these wars made Rome a society of slaves and slave holders. The rich vied with one another in possessing slaves and accumulating wealth, resulting in moral decay of the whole society. The

rule of the Consuls was followed by the rise of Julius Caesar, the most powerful general and popular leader and the foremost of the dictators of Rome.

Though he introduced many reforms in the senate and improved the condition of the poor, the enemies of Caesar murdered him in a senate meeting in 44 BC. After his death, his nephew Octavious Caesar became the undisputed master of the Roman Empire. He



Julius Caesar

was given the title of 'Augustus' meaning the "magnificent". He ruled for forty one years. He completed the work which Caesar started. His age is called "Golden Age of Rome".

Socio-Economic Condition

Agriculture was the chief occupation of the Romans. They grew barley, wheat, beans, grapes, figs etc. Along with agriculture, they domesticated animals, such as oxen, sheep, horses, assess and goats. Roman nobles employed large number of slaves for doing agricultural work and cattle rearing. The Romans had trade relations with India, Arabia, and China. Rome once expanded in territory, therearose another class in society. This class consisted of slaves, who were engaged to work in estates. As time passed on, the slaves began to occupy high position in the state. Roman conquests and its affluence. made the rich to squander their wealth in extravagance.

Contribution of the Roman civilization to the world

The most lasting contribution of the Romans was in the field of Law. The Roman Law developed in three main branches as (1) The civil Law, (2) The people's Law (3) The Natural Law. These Laws were codified by a later ruler Justinian and that code is known as the "Corpus Juris Civils" or "Justinian code" The Roman concept of "Pax Romagna" ensured rule of law through out the empire and it prohibited discriminations in Judicial procedures.

Religion played an important part in Roman government and life. They worshipped many gods; Janus, the double faced god, protected their home and family. Jupiter was the god of sky and Mars protected their armies. Venus was worshipped as the goddess of love. Prayers and sacrifices were offered by the priests on behalf of the Roman people. At first the emperors were hostile to Christianity and persecuted Christians. Christianity was popular among the slaves. Then in 313 AD Roman emperor Constantine made Christianity a state religion. In due course Rome became the seat of the Pope, the religious head of the Christians.

Roman art shows distinct Greek influence. They copied the Greek style in the construction of columns, or pillars. One of the most famous temple



Pantheon Temple

was that of the Pantheon. Pompey was a great architect. Their contributions to architecture are the arch and the dome. They developed mural paintings.

The Romans developed their own alphabet and their language was known as Latin. Rome produced some remarkable literary figures. Livy wrote History of Rome. Another famous historian was Tacitus. His "Annals and Histories" is a trust worthy work on Roman Government and society. Virgil wrote an epic poetry. Cicero was a versatile genius. Seneca, Plautus and Terence were the most popular Roman dramatists who borrowed liberally from the Greeks, Cicero, Seneca and Marcus Aurelius Antoninus were notable philosophers. 'Meditations' written by Marcus Aurelius is considered to be a master piece of stoic philosophy.

In the field of science, the Romans improved the medical science, Pliny, the Elder wrote a Natural History which contains scientific facts. Ptolemy a Greek and a great astronomer and geographer lived in the Roman empire. Galen was the greatest physician of his time. He studied the respiratory system and related diseases and wrote number of medical treaties.

The world is indebted to the Roman's for their share in the march of human civilization. The Romans acted as agents to spread and preserve much of what the ancient, Greeks had left behind as their legacy. The Latin language, the concept of Pax Romagna (emphasising on one world, one citizenship and one law) the military system, works of engineering and codified law are precious contributions of the Romans to the world civilization.

FEATURES OF DIFFERENT CIVILIZATIONS

MESOPOTAMIAN CIVILIZATION

Situated in the valley of two rivers, the Euphrates and the Tigris.

J.H Breasted described the area as the "fertile crescent".

Different groups like the Sumerians, the Amorites, the Assyrians and the Chaldeans ruled.

The form of writing was cunie form.

Epic of Gilgamesh was famous. The code of Hammurabi is the first written code of laws to history.

They were polytheistic in the religion. They worshipped Entil, Shamash, Ishtar, Venus, Marduk, Saturn etc.,

The tower of Babel is one of the wonders of the ancient world. The hanging gardens of Babylon were also another wonder of the ancient world.

The contributions in the field of Astronomy, Medicine and Geometry were noteworthy. The Ziggurat served as an observatory. The Astronomers Nabu and Kidinnu were famous.

EGYPTIAN CIVILIZATION

Situated in the valley of Nile.

Described as the "Gift of Nile" or the "Daughter of the Nile".

Monarchs called as Pharaohs ruled.

The form of writing was Hieroglyphics.

Egyptians were first to make paper from a plant called papyrus.

They were worshippers of Nature, Ra, Osiris, iris and Horus was their god and goddesses. They embalmed dead body known as Mummy was famous.

The Pyramids and the Sphinx were the most beautiful and wonderful specimens of Egyptian art and architecture. The most famous and the largest of pyramid is found in Giza. The temple of Karnak and Abu Simbel were fine monuments of the Egyptian temple architecture.

The contribution in the field of mathematics was very much astonishing. The cycle of Zodiac is a gift of Egyptians to the science of Astronomy and Astrologers.

FEATURES OF DIFFERENT CIVILIZATIONS

CHINESE CIVILIZATION

Developed on the banks of two rivers the in the region of the Balkan the early Roman Yangtse and the Howang-Ho.

Described as "Yellow River" and also referred as the "River of Sorrow".

System of Monarchy was followed.

The teaching of Confucius was very popular and important.

The hot beverage "Tea" is a gift to modern world.

"The great wall of China" measured about 2880 km in length, is considered as one of the wonders of the ancient world. It was built by the Chinese Emperor Chin-Shi - Hung-Ti.

The Chinese Scholars have also contributed to the Astronomical Science. They could also foretell the Eclipse correctly.

GREEK CIVILIZATION

The land of Greece lies peninsula.

The land juts into the Mediterranean Sea.

Different groups as Achaeans, Ionians and Dorian's settled in Greece.

The most famous philosophers were Socrates, Plato, Aristotle.

Iliad and Odyssey were the great epics. The language was of Indo European origin.

The Greeks have mastered in Epic, Drama, Poetry and history.

Homer, Aeschylus, Sophocles and Euripides were dramatists.

Herodotus, Thucydides were famous Poets. and Plutarch were historians a n d Biographers.

Science a n d Philosophy are the two sides of the same coin. Euclid was a e m i n e n t mathematician Hippocrates is the father of modern medicine.

The best architecture of Greece is the temple dedicated to Goddess Athena in pantheon. Myron and Phidias were the famous Sculptors of ancient Greece.

ROMAN CIVILIZATION

Italy was the centre of Civilization. River Tiber runs through the centre of Italy.

Oligarchy was the form of government and the idea of republicanism was their contribution.

"Vesta" the goddess of the earth was worshipped. Jupiter, Mars, Juno and Mercury were the other gods.

Romans developed their own Alphabet and Latin became their language.

Cicero, Marcus and Aurelius were the most famous Philosophers of Rome. Horace and Virgil

The Romans contribution to architecture is the Arch and the Dome.

The Romans improved the Medical Science by giving medicines freely to the poor. The significant contribution of Romans is their calendar.

EXERCISE I) Choose the correct answer. 1. ____ was called as "father of medicine". a) Alexander b) Hippocrates c)Aristotle d) Galileo 2. The Egyptian king was called as _____ b) Guru c) Pharaoh d) Minister a) Rajan 3) The Sumerian calendar based on _____days in a week. c) Ten d) Nine a) Five b) Seven 4. Gun powder was invented by c) Chinese d) Indians a) Egyptians b) Babylonians 5) The Egyptian civilization grew along with _____ river. d) Sind a) Nile b) Euphrates c) yellow II) Match the following. 1. Pyramids Hilly region 2. Great wall **Babylone** 3. Hanging garden Rome 4. All roads lead to China 5. Greece **Egypt** Nile **Euphrates** III) Answer all the Questions given under each caption. 1) Egyptian civilization a) Who built the great Pyramid of Gizeh? b) How did the Egyptian king was called? c) How did the Egyptians preserve the dead bodies? d) What is a Pyramid? 2) Chinese civilization. a) which was known as the sorrow of china?

b) Name the great philosophers in China?c) Which was the popular drink in China?

d) Who built the Great wall of China?

IV) Answer briefly.

- 1) How was the Egyptian society divided?
- 2) Write a note on the burial customs of the Egyptians?
- 3) Write a note on the ancient Greek Philosophy.?
- 4) Mention two important contributions of the Chinese to the world?

V) Answer in a Paragraph.

- 1) What were the gifts of china to the modern world?
- 2) What are the Several forms of techniques adopted by the Romans?

VI) a) Mark the following places on the outline map of the world.

- 1) Egypt, China, Babylon, Assiriya, Greece, Rome
- 2) Prepare an album to show the development of the human race.

2. Intellectual Awakening of 6th Century B.C

Confucius, Zoroaster, Mahavira and Buddha

The sixth century B.C. witnessed a great intellectual awakening in various regions of the world. The reformers of all over the world raised their voice against the existing social beliefs and systems and endeavoured to reconstruct them on a rational basis. In Persia, Zoroaster launched his protest against the prevailing religious superstitions and in China, people welcomed the philosophic teachings of Confucius which gave them a higher conception of duties in life. It was an age when people in India were disgusted with old philosophical, religious and social dogmas and were striving for holistic alternatives. The new philosophy of revolt was anti establishment in form and anti-caste in spirit. The ultimate aim of the revolt was not only spiritual but also materialistic. In due course some of the sociointellectual movements assumed a religious form. (Example: Jainism. Zoroastrianism, Buddhism.)

The thinkers of the new movements were intellectual philosophers—and concerned with life as a philosophy of power and knowledge. In India such thinkers were the wandering teachers (Sramanas). They rejected the authority of the Vedas and Vedic priests, denounced the bloody sacrifices which constituted a very large part of the Religious rituals and they did not make their philosophy and doctrines, god-centric ones.

Confucianism

Early Chinese religion was

essentially a worship of spirits and ancestors, but there was a tendency towards monotheism in the form of worship of the supreme ruler or the spirit of heaven. Heaven was the chief nature-spirit, the forefather of the emperor, and chief of the ancestor spirits. Heaven was not considered a place.



Confucius

Confucius was not the founder of any religion nor was he even a religious reformer. In his own words, he was "not a maker but a transmitter, believing in and loving the ancients". Like Gautama, he at first lived a life of luxury. His restless and penetrating mind would not allow him to remain in active. Like Socrates, Confucius was a great teacher. He established a school, in which he taught history, poetry and rules of propriety. "A man's character", he said, "is formed by the odes, developed by the rites (ceremony and courtesy), and perfected by music".

He spoke very little of gods and religious rituals, but spoke of disciplined society and of healthy social relations. Truthfulness and obedience

had to regulate social relations. Those who were in superior positions as father, teacher, husband or king had the responsibility of providing protection and fair treatment to the dependents; and if they failed in their responsibility, revolt would become unavoidable. Thus Confucius (Kung-Fu-Tse) was advocating a fair social order based on discipline and fairness to all. It would be difficult to overestimate the influence of Confucius on the Chinese people. Most Chinese scholars took pride in being his disciples. For more than 2,000 years, the philosophy of Confucius moulded and dominated the Chinese mind. Confucianism. Christianity, and Buddhism furnish the most conspicuous examples in the history of civilization, of efforts to convert into idealism the natural brutality of mankind

Zoroastrianism

The Persians, prior to the advent of Zoroaster were having such a socioreligious faith that resembled the beliefs and practices of Early Vedic Aryans. At that time they practiced polytheism and worshipped several deities representing natural forces, like Mitra, Varuna, Surya etc; they indulged in costly, bloody and senseless rituals, leading to exploitation of people by



Zoroaster

priestly class. Polytheistic faith and superstitions obstructed social unity, rational thought and moral life. Greed and selfishness ruined Persian Society. There was a need for a healthy philosophical base to redeem the Persian society from degeneration and chaos. It was at that time that Zoroaster (Zarathustra) appeared in Persia and gave them a better socio-religious order in the form of Zoroastrianism.

Zoroaster, the founder of Zoroastrianism was born in about 600 BC in North Western Iran. He was concerned with the superstitions, barbaric religious cults, polytheism and moral degeneration in Iran. He was pained to see that his people paid no discrimination between good and evil, right and wrong, individual greed and social need and between faith and superstitions. To begin with, he asked the people to give up polytheistic cults, and to accept Ahura Mazda as the only god, representing good and right. Ahura Mazda, personified as sun ,fire and light, had been carrying on a relentless struggle against the evil forces (Asuras) who represented ignorance, selfishness and all vices. The struggle between good and evil became the central theme of Zoroastrianism. This struggle is manifested not only among humans, but also in all natural expressions. He asked his people to be with the good, and abjure everything that was evil so as to attain salvation and immortality. His concept of good and evil strengthened the moral base of Persian society and his monotheism served the cause of social unity among Persian people. The Zoroastrian Ahura Mazda cult did not involve in costly rituals.

Zoroastrians could practice Mazda worship in the form of fire worship in their own houses. For them the body is only the instrument of spirits hence the corpse(dead body) did not deserve reverence or preservance. Hence the Parsees neither cremate nor bury their dead, instead they expose the corpses to disposal by nature (to decomposition or to be consumed by animals or birds). This method of disposal of the dead is considered as rejection of superstitious practices centered round death, and this contrasts the Egyptian practice of mummification. Zoroaster's teachings are found in Zend Avesta, the holy scripture of the Parsees.

The Social unity brought in by Zoroastrianism, made it to gain economic and political strength. Very soon, the Persians built a political civilization and powerful empire. Their Achaemenian empire emerged as the largest empire in the middle east.



Ahura Mazda

In due course superstitious rituals, and priestly dominance crept into the Zoroastrian system. However the Zoroastrian concepts of monotheism and the ongoing struggle between the good and evil, the necessity of humans identifying themselves with the good for salvation, influenced the theologies and philosophies of Judaism, Christianity and Islam.

Jainism

Jainism and Buddhism in the 6th century B.C. satisfied the need of the time by introducing the most necessary changes. They recognised the realties view of life. Their doctrines of Karma did not accept the belief that man's destiny is being pre-determined by super natural forces. Instead, man's own activities (Karma) determine his future. Hence man can seek salvation not from religious rituals, but by righteous conduct.



Mahavira

Jainism was as old as the Rig Veda. It was a revolt against the then existing Brahmanism. The new system wanted to make religion simple and avoid irrational rituals. It gave new socio-religious code of conduct. The Jains claim that their religion derives its tenets from 24 preceptors of different ages. These preceptors are called Thirthankaras. The earliest Thirthankara was called Rishabha. However only the 23rd and 24th Thirthankaras are considered to be historical figures.

The 23rd Thirthankara, named Parsavanath, was a prince who lived

250 years before Mahavira. He became an ascetic and preached four disciplines to his disciples.

- Non injury to living beings (ahimsa)
- 2. Not to speak untruth
- 3. Not to steal
- 4. Not to possess

Vardhamana, the 24th Thirthankara was born in Kundagrama, near Vaisali, in 599 B.C. in a royal family. His father was Siddhartha and mother Trisala. Vardhamana married Yashodha and had a daughter. After the demise of his parents Mahavira renounced worldly life and became an ascetic. After twelve years of wandering and severe penance, Vardhamana attained the KevalaGnanam(realisation of ultimate truth) at the age of 42.

There after he came to be known as Jina (conqueror of senses) or Mahavira (great hero). He went on propagating his doctrine to people and princes for 30 years. He received patronage of powerful kings of the Gangetic valley (Bimbisara, Ajatasatru etc). The Jain sangha that he founded, helped to spread this new doctrines. At the age of 72 he died at Pava near Rajagriha.

Teachings of Mahavira or Doctrines of Jainism

Mahavira had no faith in God and also rejected the authority of the Vedas. He believed that the matter and soul were two eternal elements. The soul suffers due to impurities caused by its contact with the matter and is to be born again and again until it frees itself from the bondage of cycle of births. He preached the three gems i.e. *Tri Ratnas;* Right Knowledge, Right Faith and Right Conduct. Mahavira had a

strong faith in the doctrine of ahimsa or non — injury to any living being. Ahimsa became the most prominent principle of Jainism. The Jains started to cover their mouth with a piece of cloth, to prevent even a small insect from being killed. Care was taken not to injure even any plant or tree, nor to cause pain to men, birds and beasts. This principle was against the principle of animal sacrifice associated with yagnas.

Mahavira had no faith in the caste system, and preached equality of human beings. He stressed that all human beings, irrespective of their birth, could attain salvation from the cycle of life, i.e. death and rebirth, by leading a pure and austere life based on ahimsa. He advised his followers not to make any discrimination between man and man on the basis of colour or caste.

Jainism advocates the following principles to be followed by a householder

The state of Moksha or Nirvana can be attained by observing the following three principles or Tri Ratna. (Ratnatraya) i) Right Belief, ii) Right Knowledge, iii) Right Action. (Conduct)

The code of conduct that Mahavira preached has five disciplines

- 1. Non injury to living beings
- 2. Not to utter untruth
- 3. Not to steal
- 4. Not to posses and
- 5. To practice celibacy (Brahmacharaya).

After the death of Maravira, Jains were split into two major groups. Those who followed the extreme tenets of Mahavira, and gave up clothes came to be known as Digambaras; others, who

practiced the simple disciplines of Parsavanath and wore white robes, were called Swetambaras. The Jains preferred people's languages to spread their messages. They contributed much to the native languages like Magadhi and Kannada. In Tamil they made rich contribution to the Sangam and post-Sangam literature. Many of the Sangam ethical works, Silappadhikaram, five minor epics, and grammatical works like Yapperumkalam were authored by Jain Scholars.

Jainism had its influence on social, political and religious life of our people. The literary and cultural fields were also enriched by Jainism. Anga, Upa Anga, and Kalpasastras are beautiful literary works.

Chandra Gupta Maurya and Kharavela of Kalinga embraced Jainism. It was patronized by the Rashtrakutas of Deccan and the Pallava king Mahendiravarman of Kanchi. Jains contributed many beautiful temples at Kanchi, Sittannavasal and Kalugumalai. Temples at Girnar and Mt. Abu, also belonged to the Jains.

Buddhism

Buddhism was founded by (Gautama) Siddhartha. His father was Suddodana, the chief of the Sakya clan and mother was Maya. He was born in about 567 BC in Lumbini in Nepal Terai. Siddhartha was provided with a comfortable and happy life. He married Yasodhara and had a son Rahul. Yet the royal splendours did not make him content; he was moved by human miseries in the form of old age, sickness, death, and disillusionment.

The misery of the human life cast a deep spell on Gautama. In order to find

a solution to the miseries of mankind he left his wife Yashodhara and son Rahul at the age of 29 and wandered from place to place in ascetic garb. This event is known as the Great Renunciation.



Buddha

Gautama spent 6 years as a wandering ascetic and had discussions with sages and Brahmins. Their teachings did not help Gautama to find a solution. In order to find the truth, he resorted to rigid austerities of various kinds of self-torture. Ultimately he abandoned everything and went to Uruvela on the banks of Niranjana river and sat under a pipal tree (Bodhi Tree) and meditated. He attained the Supreme knowledge" (Englightenment) on the 49th day of his continuous meditation. The place where he got enlightenment is known as Bodh Gava. Thence forth he came to be known as the Buddha(the Enlightened one); He proceeded to the Deer park at Saranath near Varanasi, and dave his first sermon which is described as "Dharma Chakra Pravartana'. (setting in motion the wheel of Dharma).

The royal families of Kapilvastu, Magadha and Kosala were attracted towards Buddhism. It was in about 487 BC he died at the age of 80 at Kusinagara.

Teachings of Buddha

The Buddha did not accept the God as a creator or destiny maker. He preached Anatmavadha (No Athma) and Anitya Vadha (nothing is eternal and everything undergoes change). He did not accept the sanctity and supremacy of Vedas and yagnas and rejected the caste system. He stressed that "man is the maker of his own destiny".

The first sermon of the Buddha at Sarnath contains his philosophy. His teachings were simple and conveyed to the masses in their languages i.e. Prakrit (Pali) and not in Sanskrit. The essence of his teachings are contained in the 'four noble truths' and the 'eightfold path'.

The four noble truths

- i) The world is full of suffering.
- ii) All sufferings have a cause. Desire, ignorance and attachment are the causes of sufferings.
- iii)The suffering can be removed by destroying its cause i.e. by the curbing the desire.

iv)In order to remove suffering, one must pursue the right path. This path is the eightfold path (Ashtangika Marga) which leads to salvation (since this path a voided ritualism and self-mortification, it is also known as golden path or middle path (Madyamika marga). In order to end our sufferings Gautama Buddha advocated the Eight Fold Path. (Eight codes of conduct)

The eightfold path consists the following principles

Right belief, Right thought, Right speech, Right action, Right means of livelihood, Right effort, Right meditation and Right remembrance or memory.

This eightfold path is considered as the middle path between extreme asceticism and self indulgence. The Buddha preached 'Nirvana', the ultimate goal in the life of a man. By a process of elimination of desire, one can attain 'Nirvana'. Prayers and sacrifices will not end the desire. He laid emphasis on the moral life of an individual.

According to his Karma theory, the present is determined by the actions of past. The condition of a man in this life depends upon his own actions. As his actions or karma are responsible for his sufferings, he can secure salvation by perfecting his own deeds. No eternal force, either God or rituals can give him salvation. Thus man becomes the maker of his own destiny.

The Buddha neither accepted nor rejected the existence of God (agnosticism). He was more concerned about the individual and his action. Buddhism also did not believe in the existence of soul. The Buddha emphasized the sprit of love. Love could be expressed on all living beings by following 'Ahimsa' (non – violence).

The Buddha preached the basic equality of all men. He had no faith in caste system. His egalitarian principles attracted deprived masses towards Buddhism. He also disapproved the supremacy of Brahmans and he laid down the concept of universal brother hood.

The Buddha condemned the practice of rituals and sacrifices, especially animal sacrifice. He rejected the authority of the Vedas, and insisted that everything must be subjected to scrutiny or reason.

He laid stress on morality. He advised his disciples to lead an honest and disciplined life. He also advised people to practice non-violence and not to indulge in corrupt practices. The Buddha established Sangha to propagate his principles and to render services to people. During the life time of Gautama Buddha, his movement made rapid progress. In the fourth council convened during Kanishka's reign, the Sangha split into two; Mahayana and Hinayana sects.

The preachings of the Buddha and Confucius have at least two things in common. They are pacific and they are rational. Their philosophies and doctrines are not God-centred. They's tressed more on 'reason' than on faith. The Buddhist scriptures, known as Pitakas are divided into three sections, namely, the Sutta, the Vinaya and the Abhidhamma.

As a result of these philosophical or intellectual awakening, the existing social and political system had to undergo changes. These philosophers liberated their people from clannish considerations and made them to have a universal outlook. A better social order and a humane administration were recognized as objectives of the people and princes. Rituals were replaced by a moral order. Rational philosophies gave a better purpose for individual and social activities. Such a development marked another progressive turning point in the history of mankind.

EXERCISE

•	Chanca	the correc	tonewor
	CHUUSE	lie Cuilec	Laliswei

1) \\/\big high portion has with speed a great intellectual awakening in the						
1) Which period has witnessed a great intellectual awakening in the						
World						
a) 5th Century	b)6th century	c) 7th century	d)8th century			
2) How many years the Philosophy of Confucius molded and dominated in						
Chinese mind.						
a) 1000 years	b) 2000 years	c) 3000 years	d) 4000 years			
3) Who was the founder of Zoroastrianism						
a) Zoroaster	b) Buddha	c) Mahavira	d) Confucius			
4) Who was the 23rd Thirthankara						
a) Rishaba	b) Parsavanath	c) Mahavira	d)Buddha			
5) In which place Buddha got enlightenment						
a) Saranath	b) Bodh Gaya	c) Sanchi d) Kar	oilavasthu			

II) Match the following.

Zoroastrianism
 Jina
 Yasodhara
 Triratnas
 Sangha
 Buddha
 Buddhism
 Pipal tree
 Rajagriha

Mazda

Conqueror of senses

III) Answer all the questions given under each captions.

1) Zoroastrianism.

- a) Who founded Zoroastrianism?
- b) Which was the wise sprit of Zoroastrianism?
- c) What type of worship represented the monotheistic basis of Zoroastrianism?
- d) What was the name of the Holy scripture of the parsees.

2) Jainism.

- a) How many Thirthankaras were in Jainism?
- b) Who was the earliest Thirthankara?
- c) What was the name of the last Thirthankara?
- d) Who preached the four disciplines to his disciples?

3) Mahavira.

- a) What was the original name of Mahavira?
- b) Where was he born?
- c) What is meant by Jina?
- d) How many years he wandered and severe penance?

4) Buddha.

- a) Who founded the Buddhism?
- b) What was his original name?
- c) Where did he give his first sermon?
- d) Where he got his Enlightenment?

IV) Answer in brief.

- 1) Why did Intellectual awakening start in the 6th century B.C.?
- 2) Write a short note on Mazda?
- 3) What was the four discipline preached by Mahavira to his disciples?
- 4) Write about Pitakas.
- 5) In which council the Sangha divided into two?

V) Answer in a Paragraph.

- 1) Give an account on Confucius.
- 2) What was the importance of Zoroastrianism.?
- 3) Write a note on the teachings of Mahavira.
- 4) Enumerate the code of conduct that Mahavira preached.
- 5) Write a paragraph on the Eight fold path of Buddhism.

3. MEDIEVAL AGE

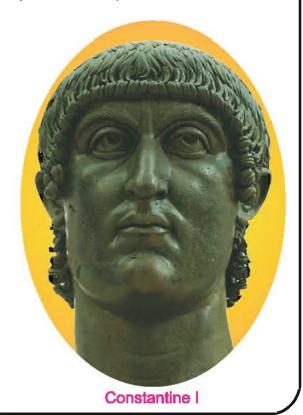
The Medieval Europe

The period from 600 AD onwards till 1500 AD is known as the Medieval age, in European history. It did not begin exactly at the same time in all the countries of Europe. Historians divided the medieval period into two parts. From the beginning of the fall of Roman empire till 1000 AD is called the Early Medieval Age and from 1000 AD to 1500 AD the Later Medieval Age. The beginning of the medieval age is marked by the fall of the Roman empire. The early medieval period has been termed as the "Dark Age", because chaos and degeneration became prevalent everywhere. The central authority of the government became weaker and exploitation of the common people increased. The medieval age saw the emergence of a new religion Islam, which became internationally important.

On the political front, Medieval Europe saw the rise of the Eastern Roman Empire or Byzantine Empire with its capital at Constantinople. This empire held sway over whole of East Europe till about 1400 AD. The Romans proved themselves to be great warriors and conquerors. It was because of their ability and wisdom that strong rulers emerged. After the fall of the Roman Empire in about 800A.D Emperor Charlemagne established his power over a vast area-comprising modern France, Germany and a part of Italy. This empire lasted till his death and by about 1000 A.D another empire called the Holy Roman Empire was established. Thus towards the end of 14th century. Europe's political map had undergone many changes with many

rulers having sway in different parts of Europe at different times.

Rome was not built in a day. Similarly the decline of the Roman empire was not the work of a sudden or abrupt event but a long-drawn-out process spreading over nearly three centuries. The death of Marcus Aurelius in AD 180 was a turning point in the history of the Roman Empire. The safety, security and integrity of the empire was threatened from within and without. In fact the steady decline of the empire started from the latter half of the second century. Before the final deadline was drawn in A.D. 476, Rome did produce successful pilots in the storm in the persons of emperors like Diocletian (A.D.284-305) Constantine I the Great (A.D. 306–337) and Theodosius I the Great (A.D.378-395).



28

Causes for the down fall of the Roman Empire

The decline of the mighty Roman empire of the Caesars was wrought by time and nature, Hurricanes and earthquakes. Fires and inundations reduced the works of ages into dust.

The influx of wealth into the country brought in its wake moral degradation. The Romans lost all their old virtues of discipline and duty to the state.

The growth of the Christian church formed "a state within a state". In policy and action, the church stood against the empire.

The political mechanism of Rome with her constitution was quite unsuitable to an empire. A corrupt and expensive bureaucracy further worsened the situation. Rome became a big empire and territorially it became vast and impossible to control it. The Romans did not treat their colonial people well. The administration was weak and relaxed. Frequent wars, also contributed to her decline.

Decline of the Roman Empire

As Roman Empire expanded trade, industry too increased. Colonial people were exploited and their wealth flowed into the capital. Romans gave up hard work and wanted their slaves to work and fight. The empire was a Republic in theory but in practice Rome began to be governed by emperors. The people lost their freedom of speech which was so valuable. Senate and general assembly included wise people. When dictators came to power senate became subservient to them. In society, atmosphere became tense and suffocating. The indifferent attitude of masses towards their rulers became a cause for the downfall.

There was no regular law of succession under the Roman legal system. The internal disputes, action of a Alison and groupism weakened the empire. Thus vastness of Empire, frequent civil wars, luxurious life of Romans, despotism of Roman emperors, confused social atmosphere, high taxes and invasion of barbaric tribes led to the downfall of Roman Empire.

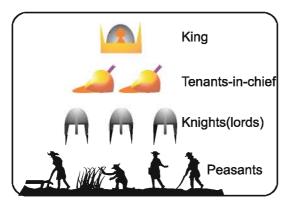
Barbarian Invasions

When the star of the empire was falling into evil days, the stunning blow to the tottering empire was given by the barbarian invasions. These invasions shook up the Roman solidarity. Barbarians like the Goths, Huns and Vandals poured into the country in large numbers and waited for the most opportune moment to strike at the trunk of the withering empire. Their aim was to loot the people of the conquered territories. The soldiers of the barbarian tribes had no love for the country but often revolted against weak rulers. Thus the barbarian invasions disturbed the internal peace. Under this condition the kings failed to realize taxes from the people. They felt unsafe and insecure. In this way the circumstances bound the kings, Lords and the common people to accept the new system of feudalism.

Feudalism

An important feature of the Middle ages was feudalism. The word "Feudalism" is, derived from the Latin word "feud" or "fief" which means a land held on condition of service. Feudalism was essentially an agrarian system. The peasants or the farmers were obliged to give a portion of the produce from the land to the lords as rent or taxes or they had to work on their

lord's land or farm without any payment.



A chart depicting feudal hierarhy

Features of Feudalism

Feudalism was an organization of society and its government based on land ownership. According to the system all lands belonged to the king who divided the kingdom into several fiefs and gave each fief to a baron or tenant-in-chief on condition of military and administrative services and other aids to the lord. As the fiefs were granted to bishops and other church dignitaries, they also came under the category of tenants-in-chief. The king in his turn granted protection to them in times of danger. Thus feudalism was a political arrangement in its origin. The baron in his turn subdivided the land into several manors and gave each manor to a sub tenant on similar conditions. Thus the three important features of feudalism were feudal tenure, vassalage and immunity.

Merits of Feudalism

Feudalism proved to be a useful institution to protect the people from chaos and anarchy. It brought safety security and orderliness to the medieval society. The decentralization of political authority and distribution of power made the way to a new political development namely "parliamentary

democracy" in the later centuries. The lining of military and agricultural services with a well-graded social hierarchy fixed specific rights and duties upon the rulers and the ruled. The manorial system, an integral economic part of the feudal system saved Europe from utter confusion in the farm front. The exhibition of skill and valour by the knight errants encouraged a sprit of sacrifice and devotion to general cause among all people.

Demerits of feudalism

Feudalism was not an unmixed blessing. It brought the growth of baronial power. Jealousies among the barons and suspicion between the king and the lords encouraged local feuds. The king had to rely upon the military services provided by his vassals. The extensive holdings of the church gradually created the conflict between the Popes and the kings.

The feudal system was opposed to the emergence of a strong national government. The feudal lords ruled over their people in a tyrannical manner. They were either at war with the king or with the fellow lords. The army was not given uniform training in the kingdom. Different system of justice were practiced from fief to fief. The society was divided between the rich and the poor. As a result, peasants suffered many hardships. The church also became a very big feudal organization. Thus the feudal system became largely responsible for the conflicts between the kings and the church.

Feudalism degenerated into the sharp division of society of the haves and the have-nots. Growth of learning and education did not materialize in full

bloom under feudalism. Justice became a mockery under the feudal system.

Decline of Feudalism

Feudalism as a social force began to decline even from the 12th Century onwards, and as a political force from the 13th century. The rise of strong monarchies along with the rise of the bourgeoisie or middle class as a major class, completely changed the political values. The growth of representative institutions In different parts of Europe undermined the feudal setup. The crusades and the invention of gun powder sounded the death-knell of feudalism.

During the Age of Faith, the conflict between spiritual authority and temporal power resulted in victory to the former. The Age of Faith gradually gave place to the Age of Reason. The renewed study of Roman law made it to understand the superiority of such a law as against the clumsy feudal laws.

The rise of the papacy

The Christianity got political support under the Roman Emperors from the days of Constantine. By the 6thcentury A.D the Pope became the head of the church and kings were the rulers of the kingdoms. Sometimes, the Popes were stronger than the king. There developed in Europe a system of dual leadership under the Popes and the kings. Later, this dual leadership led to the rivalries between the church and the state. The Pope was considered as the representative (Vicar) of Jesus Christ. He was the highest authority of the church and was stronger than the kings. They could give directives to the kings and force them to obey their orders.

The papal authority became supreme due to missionary spirit of Christians. In the establishment of papal supremacy, monasteries played a very significant and important role. The character of monks, educational institutions of monasteries attracted the people towards papacy. It made certain valuable contributions.

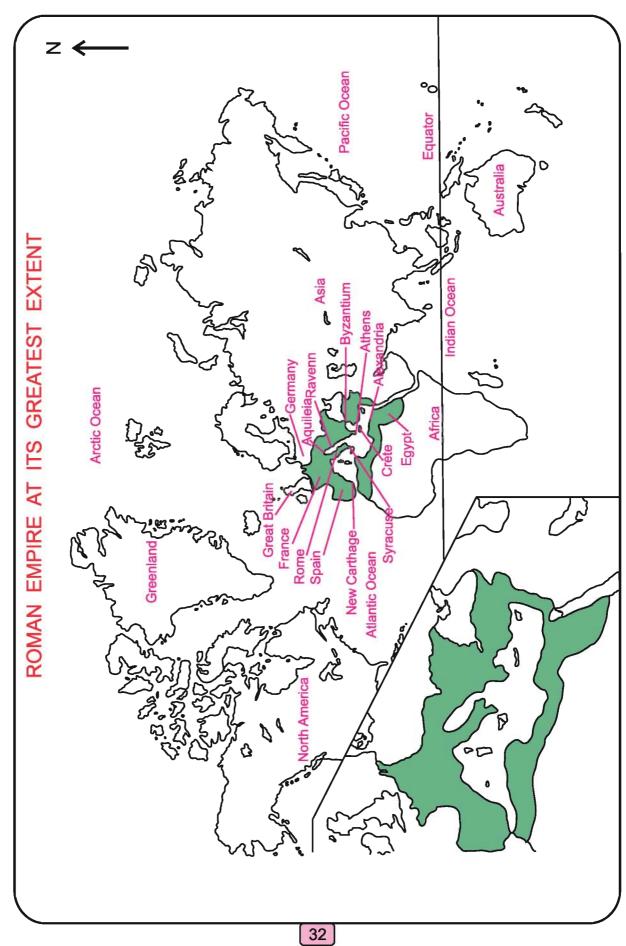
Effects of papacy

In the social life, people became God fearing, began to help the poor, the needy and the deserving. The sense of morality and character as well as dignity developed. Beautiful churches were developed. Religious dogmas and hymns became the themes of literature. In the eyes of the papacy, all the high and the low were equal. With the result it created a sense of equality among all. It was due to papal educational institutions that knowledge developed and also could be passed on to the present generation.

Holy Roman Empire

Holy Roman Empire was an attempt by the kings to attain political unification of Christian Europe with close co-operation of the church. In the old Roman empire there was no place for Christianity. In the new empire Christianity was the recognised religion. Rome was only nominal centre of authority. The old empire was Italian in its out look whereas the new one was Christian in nature and character. Thus the main idea of creation of an empire was to bring all Christian states together in a fraternity. In the empire, the emperor was required to be crowned by the Pope.

The king possessed vast powers. He wanted that the Pope should be under his control. The Pope belonged to the other world and had superior



position over the emperor. The greatest service of the Empire was that the whole of European continent, which was divided into small units, were united into one empire. It strengthened hereditary system and weakened the republican system. The Holy Roman Empire contributed a lot by way of crushing feudal lords and feudalistic tendencies. Mainly it was responsible in bringing national unity in Germany. It was as a result of Holy Roman Empire that nation states of England, France and Spain came into being.

Medieval Towns and Universities

New towns began to emerge as centres of craft and trade. The early towns were very small, as the number of artisans increased and the trade became extensive, the towns too became bigger. When western Europe traded with the East, Italy enjoyed an advantage over others because of their location. Genoa. Florence and Venice became trade centres. Genoa and Venice were coastal towns whereas Florence. Pisa and Milan were situated on inland trade routes. In Holland, Belgium, Germany, France and England a number of cities grew up that were either sea ports or centres of trade and commerce. These medieval towns became centres of the Medieval European civilization and culture.

Education

In the early medieval period it was the church that gave education to the people. It taught the subjects like grammar, logic, arithmetic and theology. Some of the monasteries became centres of learning. Many universities were set up. The monks dominated the universities. Theology and philosophy were given prominence. History and science were

ignored. The books were hand copied. The university of Bologna was famous for the learning of law. Arabic and Hebrew were taught in Spanish University.



Bologna University

The University of Oxford in England was modelled on the Paris university of France. The Cambridge university came into existence in the 12th century.

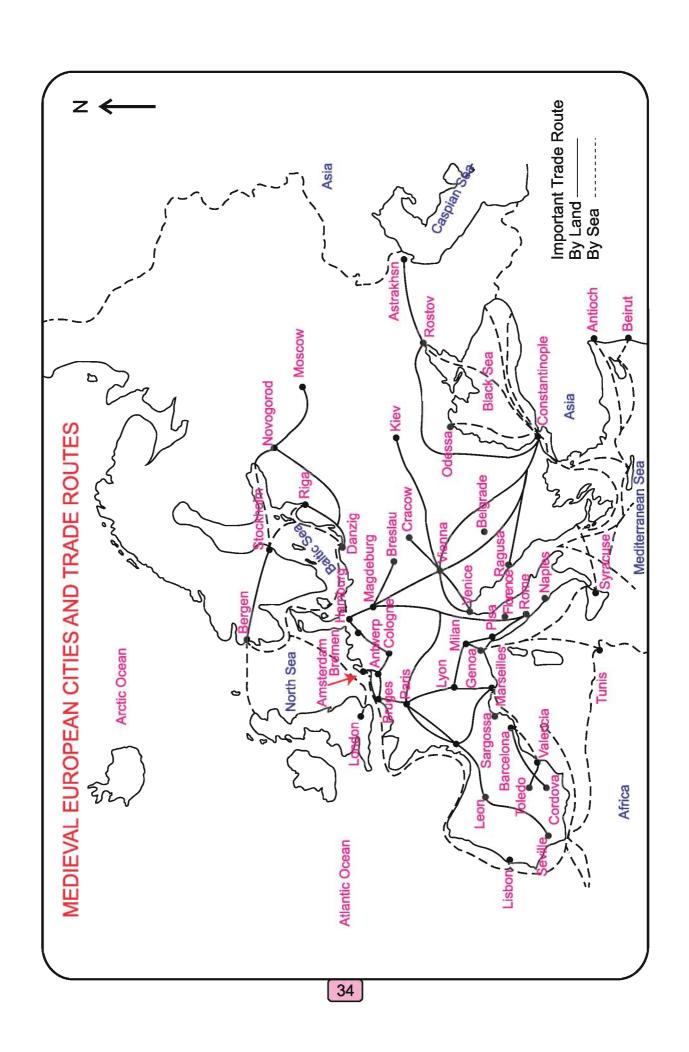
Rise of Islam

During the middle ages, Arabia, a vast desert land in south west Asia, became the birth place of Islam. Islam is one of the most important world religions. It united the various warring tribes.



Mecca

The founder of the Islamic religion was Prophet Mohammad. Islam laid stress on the Unity of God and on following high moral standards and



principles. Mecca and Medina became two important pilgrim centres in Arabia. The main and significant contributions of Islam were in the field of literature. science and medicine. Due to their superior organization, faith in their ultimate victory and unabating zeal in their mission, the Muslims were in a position to secure power in many countries. The Islamic culture served as a link between the Christian west and the rich fabulous Orient (east). It possed a serious threat to the Christian culture. The Arabs wanted to spread their reliaion in the conquered regions. This enthusiasm for the spread of their religion led to the fast expansion of their empire.

Crusades (1095 - 1444)

Crusades were Holy wars of the Christians of Western Europe against the Turks, the Muslims to have free access to their holy lands in the Middle East. Every pious Christian considered it his sacred duty to visit their Holy places where the relics of Christ were available. Jerusalem was one such important place which was captured by Turks in 1071 from the Fatimid Caliph of Eqypt. Upto 1076, there was no real problem due to the tolerant policy of Caliphate. But in 1076, Jerusalem went under the control of Seljuk Turks, who were religiously intolerant.



Crusades

To save themselves from the persecution and humiliation and to retrieve access to their holy places the Christians undertook a crusade. Pope Urban II gave a call to the Christians all over the world to come together and to take arms. There were different factors responsible to their quick response. The religious fanatics joined to discharge their religious duty. Some joined to show their fighting skills and for plundering and looting. The wars of the "Cross against the Crescent" according to tradition, were eight in number. The first four were Major Crusades and the last four Minor Crusades. After a meeting of council at Clermont, they affixed cross on their garments. The Muslim had a crescent on their banners. Thus the crusades, the long drawn out "wars of the cross against the crescent" began.

First Crusade (1096 - 99)

The first crusade was purely a French-dominated expedition. However the three important crowned heads of Germany (Henry IV), England (William II) and France (Philip I) did not participate in this crusade.



Jerusalem

The first crusade started in 1096.AD. After many hardships the Christians reached Jerusalem. A Christian state was established under Godfery of Bouillon. This new kingdom had dependent states of Tripoli, Edessa and Antioch. The Christians remained in possession of occupied territories for about 80 years.

Second Crusade (1147 – 1148)

The Muslims could not be contained for long. Zangi, a Muslim chieftain of Mosul, put an end to the independent existence of Edessa. The news of the loss of Edessa provoked the Christian world for a concerted action. St. Bernard of Clairvaux was the author of the second crusade. Concord III of Germany along with the French king Louis VII organized the second crusade. Both of them were defeated separately in Asia Minor by the Turks, thus ending the crusade in failure.

Third Crusade (1189 – 1192)

The Third crusade was the most spectacular of all the crusades. The Kings of Europe, Fredrick Barbarossa of Germany, Philip Augustus of France and Richard the Lion Heart of England participated in the crusade. There was unfortunately divided counsel on the nature of the campaigns to be executed and it seriously affected the tone and morale of the forces. Frederick Barbarossa set out in 1189. Philip and Richard I started in 1190. The depleted



Richard I

forces of Frederick along with other crusaders were engaged in besieging Acre in the same year. Philip landed early in Acre. Richard captured Cyprus in 1191 and arrived at Acre in the same year. Philip returned to France on the pretext of his illness. Richard I defeated Saladin in the battle of Arsuf. It was this battle which earned for Richard the title of "Lion- Heart". This Crusade saw the generosity and chivalry of the Saracen Saladin in permitting the pilgrims to visit the city of Jerusalem. The third crusade was a partial success. A new military order called Teutonic knights was founded during the Third Crusade.

Fourth Crusade (1202 - 1204)

This Crusade was a complete failure. It became clear that the Christians had lost their religious spirit. This Crusade started in 1202 and lasted for about 2 years. The sack of Constantinople began in 1204. The Latin empire by Baldwin of Plunders was inaugurated and lasted till 1261. In this fourth crusade, the army of the Cross was mismanaged.

Children's Crusade (1212)

The leaders of the children's crusade were Nicholas of Germany and Stephen of France. They believed in their heart of hearts that God would mysteriously guide and guard the children in their endeavors. But none of the children went beyond Italy. Many died of hunger and starvation.

Causes for the failure of the crusades

The wars were fought in a far distant, alien and inhospitable regions. It exhausted the energies and sapped the sprit of the people. The crusaders failed in their primary motive of recovering the holy places of Jerusalem and Bethelham.

The Crusades were not properly organized. There was lack of unity and discipline among the leaders. The struggle for supremacy between the papacy and their Empire had a baneful effect on the issue. The weakness of the Byzantine empire was another serious cause for the collapse of the crusades.

Results of the Crusades

The Crusades failed in their most important objective of recovering the holy places in Palestine but led to the establishment of new Christian kingdoms in Spain and Portugal.

The Crusades in the end left Byzantine power vastly reduced in prestige and honour. The loss of Byzantine prestige was never fully recovered.

The crusading sprit spread like a contagious disease and it led to the conversion of Slav races on the shores

of the Baltic sea to Christianity and the Germanisation of the population. Feudalism received its rudest shock from the Crusades.

The crusades seriously affected the future of the military orders. The power and prestige of the Popes increased.

The extensive travels undertaken during the crusades provided the people with an opportunity to promote their knowledge of geography. It prepared the way for the discovery of new trade routes in which Portugal and Spain became pioneers. It gave an added fillip to the ship building industry which in turn paved the way for the use of Mariner's compass, etc.

The Crusades created a sprit of enquiry and prepared men's mind for the Renaissance of the 16th Century.

EXERCISE

) Choose th	ne correct	tanswer
-------------	------------	---------

1) Early medieval period has been termed as				
a) Golden age	b) Copper age	c) Dark age	d) Iron age	
2) Feudalism was a social system based on				
a) Religion	b)Army	c) trade	d) Land	
3) Prophet Mohammad found the religion of				
a) Christians	b) Hinduism	c) Islam	d) Sikhism	
4) The title of Lion heart was given to				
a) Philip	b) Richard	c) Fredrick	d) Nicholas	
5) Holy Land of Christian is				
a) Mecca	b) Italy	c) Vatican	d) Jerusalem	

II) Match the following.

1) Constantine Tribes2) Fief Land

3) Cambridge Constantinople

4) Genoa University

5) Barbarians Coastal town

Code of conduct

Emperor

III) Answer Briefly.

- 1) What is Feudalism?
- 2) What is Manor?
- 3) What are the coastal towns and trade centers?
- 4) How did the king get military service in the time of war?
- 5) Who were the leaders of the children's crusade?
- 6) Mention some of the universities of medieval Europe?
- 7) What was the aim of the crusades?
- 8) Who was the authority of the Church?

IV) Answer all the questions given under each heading.

1) Feudalism.

- a) From which word "feudalism" is derived?
- b) Who were the Feudal Lords?
- c) How was the Feudal village called?
- d) When did this system prevailed in Europe?

2) Papacy.

- a) Who was the head of the Church?
- b) How was the relationship between the Pope and the king?
- c) What was the role of the Pope?
- d) What was the result of the dual leadership?

3) Crusades.

- a) Which was the holy land of the Christians?
- b) Who gave call to the Christians all over the world?
- c) Where did the council met?
- d) How many crusades had taken place?

4) Mohammed the Prophet.

- a) Which was the birth place of Islam?
- b) Who was the founder of Islam?
- c) What are the important cities in Arabia?
- d) What did Islam religion stress?

V) Answer in a paragraph.

- 1) Describe the barbarian invasion.
- 2) Write the causes for the downfall of the Roman Empire.
- 3) Explain the rise of Islam in Europe.
- 4) Explain the results of the crusades.

VI) Mark the following places on the outline map of Europe.

- a) Rome b) Constantinople c) Venice d) Genao
- e) Paris f) London g) Pisa h) Florence

Mark the following countries.

- a)Italy b) Greece c) Spain d) England e) France
- f) Germany g) Arabia

4. BEGINNING OF MODERN AGE

Introduction

The transition from mediaeval "Dark Age" to Modern Age is caused and marked by certain new trends and the developments such as Renaissance, Humanism, Sprit of Enquiry, Geographical Discoveries and Reformation.

The ancient period in European history came to an end in 476 A.D. with the collapse of the mighty Roman Empire. The barbarians who pulled down the empire had no taste for the pursuit of classical languages and fine arts. The neglect of learning immersed Europe in ignorance and darkness. "beauty is a snare, pleasure a sin, the world a fleeting show, man sullen and lost, death the only certainty; ignorance is acceptable to God as a proof of faith and submission; abstinence and modification are the only safe rules of life". They were the fixed, ideas of the ascetic mediaeval church. But at the beginning of the 16th century, a renewed interest in the study of Greek and Latin brought about the age of reason. The Renaissance marked a reaction against established conventions. A spirit of enquiry developed. People began to doubt. question and challenge instead of blindly believing anything that was taught by the church. This spirit of enquiry stimulated the progress of science, architecture, sculpture, painting, literature, geography, religion etc.

Renaissance

Renaissance means revival or rebirth, the age of reason marks the revival of classical Greek and Roman spirit.

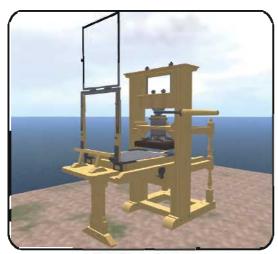
Renaissance signifies, "emancipation and expression". On the intellectual side, it marks the revival of literature and art, on the political side it marks the death of the universal authority of Pope, the emergence and the consolidation of well organized nation states. Socially it marks the spirit of individualism and the recognition of man as individual in society. Ecclesiastically, it marks the crumbling up of the idea of the universal church and emergence of the national churches. "Renaissance" means "rebirth" of classical spirit on several fields of human activities.

Renaissance in Italy

Italy, "the school of Europe", was the birth place of the Renaissance: feudalism failed to take deep roots in Italian soil, in the middle ages. The nobles and the church controlled the activities of the people. In due course, the death knell to feudalism was sounded by the crusades, which was associated with the invention of gun powder and the growth of nation states and towns in power and independence. Northern Italy was in a position to patronize art and literature. Moreover. Italy was the seat of an ancient civilization which reminded the people of "the grandeur that was Rome". The Renaissance scholars wrote in the vernacular languages which appealed to the masses. The absence of a strong centralized monarchy in Italy provided excellent opportunities for intellectual outbursts. Renaissance as a movement began in the 14th century with the publication of the "Divine comedy" by the greatest Italian poet Dante and reached its culmination in the next century.

The Renaissance movement comes under two broad divisions, namely humanistic phase or the revival of classical learning and literature, and the regulation of classical art. The first great pioneer in this line was Petrarch. He collected the classical manuscripts written by Plato, Cicero and others. He gave a new life to the ancient classics. Boccaccio, the disciple of Petrarch, followed the footsteps of his master.

The humanistic movement was accelerated by the capture of Constantinople by the Turks in 1453 A.D. The invention of the printing press



Printing press

helped in the production of cheap books. It considerably helped the cause of humanism.

Renaissance also left its mark on the artistic side. The barbarians destroyed most of the remnants of culture of ancient Greece and Rome in the middle ages, the Church controlled all the cultural activities of the people. Art was influenced by the church. The works of art were created mainly with the object of perpetuating religion. Renaissance created a spirit of devotion towards the Greek art and literature in the hearts of the people

Gradually Romanist spirit began to find expressions in the arts, even in religious subjects. Leonardo da Vinci was a versatile genius, a writer, scientist, inventor, engineer, architect and painter. As a result, architecture, sculpture, painting, music and other fine arts progressed tremendously though the influence of Christianity was very much visible on the arts of this time.



Last Supper

Michael Angelo, Leonardo da Vinci, Raphael and Titian were the great painters of the time. The remarkable painting of Michael Angelo is the "last judgment".



Mono Lisa

Leonardo da Vinci's famous paintings are "Mona Lisa" and "Last supper", Raphael was famous for his paintings of "Madonnas". Titian was noted for his mastery of colour. Peter

Brueghal the Elder's genre paintings depicted scenes from robust peasant lives.



Madonnas

Sculpture

The sculptors produced works of greater beauty and greater originality. In architecture, the architects turned to classical models.



St.Peters Cathetral



Michelangelo's Architecture

The best specimen of the architecture of the period was St.Peter's cathedral at Rome. Michaelangelo's "Moses" is a remarkable sculptural expression of the time.

Music

Music also made tremendous progress in the fourteenth century. People began to take much interest in the instrumental music instead of vocal. Various changes occurred in the system of music. Like other arts, Italy led the path in music. Music was liberated from the monopolistic cultures of the church. New song forms and new musical instruments helped the emergence of secular music.

Rise of Humanism

A shift from God centred and Church centred literary activities to human centred literary trends is known as humanism. The spirit of Humanism was found in ancient Greek and Roman literature. But in the medieval age owing to the influence of church the spirit of spiritualism, escapism and worship of God became quite popular and people began to think more of the other world than this one. Owing to the influence of renaissance, people began to take interest in ancient Greek and Roman literature. Now they began to take interest in expression of humanism and their interest in the medieval culture and civilization diminished.

Originator of Humanism

In the modern period Petrarch is supposed to be the originator of humanism. Dante and other authors and supporters of humanism were the followers of Petrarch. The contemporary ruler of Florence, Lorenzo de Medici was the great patron

of scholars. He provided shelter to various authors of humanism.



Leonardo da Vinci

The humanism spread from Italy to other countries of Europe. Micheal Angelo, Machiavelli, Leonardo da Vinci, Dontallo Botticelli, Robbia, Ficino were some significant writers of humanism Andrew Vesalius, a doctor to Emperor Charles wrote "Seven Books on the structure of the Human Body" Leonardo da Vinci drew a sketch of the future airship.



Andrew Vesalius

Human happiness and progress were the core objectives of the ancient

Graeco Roman literature. The church controlled medieval society encouraged and patronized only such literature which were agreeable to the interests of the church. Life was portrayed as devoid of any worth, pursuit of happiness was treated as a sin. Pessimistic spiritualism found expression in all church sponsored literature. The rediscovery of the Graeco Roman spirit of humanism inspired a new human - centred literary trend in Europe.

Science

The Renaissance spirit affected the field of science also. Friar Roger Bacon, the father of modern sciences, was the greatest medieval exponent of observation and experiment. His writings developed a critical and scientific sprit. Notable contributions were made in astronomy, mathematics, chemistry, physics and medicine. Copernicus discovered that the earth moves round the sun. Galileo perfected the telescope.



Galileo's Telescope.

Both contributed to the heliocentric theory. Newton discovered the "law of gravitation". Kepler laid the foundation, of mathematical astronomy.



Kepler

It was also an age which witnessed the invention of printing. Far-reaching results were achieved in geographical discoveries. Columbus, Vasco-dagama and Magellan were the greatest figures in this field. The invention of mariner's compass (is china) was of immense help to the sailors, especially in their voyages to the south of Equator.

Results of the Renaissance

- 1. The study of classical languages developed a spirit of enquiry in the minds of the people. Instead of blindly believing what was written by others, they began to doubt, question and argue which enabled them to arrive at the truth. The quest for truth brought about profound changes in science, art, politics, religion and literature.
- 2. Renaissance created a passion for reason in the minds of the people.
- 3. The Renaissance kindled the creative talents of the people and slowly paved the way for many inventions and discoveries.

- 4. Before the Renaissance the ruins of Greece and Rome had no fascination for the people. But after the Renaissance the people evinced keen interest on the ruins. Thus the science of archaeology came into existence.
- 5. The reasoning sprit opened new opportunities for the people to find out loopholes in religious beliefs. The invention of the printing press helped to publish books on a large scale.
- 6. The new inventions, discoveries and writings of eminent men completely changed the outlook of the people towards the state. It developed a sprit of nationalism and individualism. It resulted in the emergence of nation states such as England, France, Holland, Portugal and Spain.
- 7. The study of the old classics which ran counter to Christian ideals greatly weakened the church and revived the spirit of humanism.
- 8. The study of history became more scientific. The Renaissance resulted in "Humanism" noted for its sympathetic and devoted approach to mankind.



Erasmus

The Greek and Latin classics were humane in nature. The protagonists of this culture were called "Humanists",

and their subjects "Humanities".

"Humanism, whose seed was sown by Petrarch in the fourteenth century and whose fruit was plucked by Erasmus in the sixteenth, still lives in higher education through out Europe and America".

Reformation

The term 'reformation' refers to the religious reform movement in the Catholic Church which led to the rise of a new section of Christians called as Protestants. These Protestants broke away from the Roman Catholic Church in order to form new churches on nationalist lines. Though reformation was a religious movement it was an outcome of the socio, economic and political conditions that prevailed in the sixteenth century.

During the mediaeval period the Church had developed a powerful hierarchy led by the Pope (Bishop of Rome) and assisted by cardinals, archbishops, bishops and priests. Every Christian had to perform seven sacraments in his life time with the assistance of the priests of the church. Hence the church had acquired absolute authority to control the personal lives of Christians. The church exploited this authority by all means.

Religious appointments were sold and those who purchased the positions charged high fees for the services they rendered. The new learning promoted by the Renaissance and growth of capitalist tendencies influenced some of the clergymen. The popes and higher clergy lived like princes. They indulged in corrupt practices to amass wealth. They lived a life of opulence, immorality, running gambling houses and keeping mistresses.

Dispensations which exempted people from certain laws of the church such as with regard to marriage and imposition of penance were sold.

Moreover any opinion or doctrine contrary to the church dogma was considered heretical. Such heretics were burnt at stakes. For example John Huss was burnt at the stake in 1415.A.D.

The growing nationalist sentiment also worked against the church. Powerful dynasties were emerging in Spain, France and in various parts of Europe which resisted the overlords of Rome. The church collected various taxes and a large portion of this was sent to Rome, the head quarters of the Catholic Church. Christians of various countries like Germany, England, and Netherlands etc. disliked this practice. The rulers of various countries resented the control of the church on their royal authority, and the church lands being exempted from royal taxes.

The immediate cause of the Lutheran revolt was the issue of 'sale of indulgences', A magnificent church known as St.Peter's church was being built by the Pope. A lot of money was



Martin Luther

required for the building of that church. The Pope ordered the subordinate churches to raise funds for the construction of that church. Johann Tetzel, a Dominican friar, in orer to raise funds, sold indulgences for the remission of the penalty for the sins in the purgatory. The quantum of remission would be in proportion to the amount of money spent for the purchase of 'indulgences'. Such vulgar salesmanship of the clergy shocked Pious clergy like Martin Luther who raised a banner of revolt against the corrupt practices of the Roman Catholic Church.

In 1517, Martin Luther nailed his protest against the indulgences in the form of 95 theses to the door of the Wittenberg church in Saxony. His protest theses were translated, copied, and circulated widely in printed form. In 1520 Luther published three pamphlets i.e. 1) AN ADDRESS TO THE NOBILITY OF THE GERMAN NATION.

2) ON THE BABYLONIAN CAPTIVITY OF THE CHURCH AND 3.THE FREEDOM OF THE CHRISTIAN MAN.

In his writings Luther questioned



Pope Leo X

the authority and relevance of the Pope and church councils.

Pope Leo X, through a papal bull (papal order in sealed cover) threatened Luther with excommunication if he failed to recant. But Luther encouraged by the support of the German people and princes, defied the authority of the Pope and burnt in public the papal bull and some books of canon law. This "burning of the books" symbolized the 'declaration of independence' of the German principalities from the control of the Roman Pope.



Charles V

Charles V, the Holy Roman Emperor, summoned Luther to an imperial Diet (Assembly) at WORMS, and asked Luther to recant.

Supported and protected by German princes led by Frederick of Saxony, Luther refused to retrace his step. Lutheranism refused to accept the mediatory role of the Roman Church, reduced the sacraments from seven to three (i.e. baptism, marriage and communion) condemned monasticism (and the clergymen were to marry) and adopted native German language for religious and secular

purposes. The German princes and nobles also took possession of the church lands. In 1529 the Lutheran princes defied an imperial edict-asking them to suppress Lutheranism - made a formal 'protest' that "they would remain loyal to the God rather than to the Emperor". Hence the Lutherans were called 'protestants'.



Ulrich Zwingli

Ulrich Zwingli in Zurich (Switzerland) and a French clergy John Calvin. Who fled to Switzerland similarly raised 'protests' against the papal order and more or less toed the lines of Martin Luther. All of them wanted the church to be restored to its early purity and simplicity. In England the Tudor king Henry VIII quarreled with the Pope Clement VII, on the question of securing papal sanction for his divorce with Catherine and marriage with Anne Boleyn. He pressurized the English church to break away from Rome in 1533. In the succeeding year the 'Act of supremacy' of the parliament made the English king the supreme head of Anglican Church. Thus a clerical protest against Roman Catholic Church resulted in the emergence of non - Latin national states and non-Catholic Christian sects in Europe.

Counter Reformation

The triumphant progress of Protestantism was viewed with great concern and fear by the Roman Catholic Church. The aim of the counter - reformation was primarily to restore the Church to a condition of prestine purity and sublime holiness. The church stood in dire need of protection from within and without. Before things went out of control, it took drastic measures to arrest the onward march of Protestantism. It also committed itself to the purification of the Church. This movement for reform within the church and the steps taken by it to arrest the growth of Protestantism came to be known as Counter-Reformation.

Society of Jesus Ignatius Loyola and the Society of Jesus (1491 – 1556)

Ignatius Loyola, a Spanish nobleman, was born in 1491. He became a soldier and served Emperor Charles V by fighting the French. He was wounded in a battle, and during the period of treatment he had strange religious experiences. He underwent a great transformation after studying the



Ignatius Loyola

works relating to the lives of Jesus Christ and other saints. He founded a religious order known as the Society of Jesus with papal consent and enrolled sixty members (Jesuits) who were subjected to more religious discipline and training. Each member had to undergo Loyola's spiritual exercises and in 1540 the Pope sanctioned increase in the strength of Jesuit members. The Jesuits, who swore to lead a life of poverty, chastity and "service to god and Christianity", spread themselves throughout the European continent and worked tirelessly with great zeal as missionaries. They spread the message of Christ, and opened schools everywhere. The Jesuits were the agents in propagating the counterreformation. The Jesuits in their missionary activities achieved remarkable success. The Jesuits did yeomen service for the cause of Catholicism.

The Council of Trent

The Council of Trent (1545 – 63) aimed at reforming the Catholic church. Though it failed to bring about unity in Christendom, it gave a clear definition to catholic doctrines; the council marked the triumph of populism. After the Council of Trent, the Pope was recognized as the supreme arbiter in religious matters as far as Catholicism was concerned. Evil and unworthy priests were to be removed. Celibacy was enforced. The service-book of the church was completely renewed and the Bible was revised.

The inquisition

In order to root out heresy, the church-court-'inquisition'-meted out brutal punishments to people who wavered in their allegiance to the

Catholic faith. The Spanish inquisition was founded during the time of Ferdinand and Isabella. Torture was used to extract confession.

The Church also prepared an 'Index' of hierarchical books and passages and such hierarchical writings were prohibited for the believers.

Geographical Discoveries

The Age of Renaissance had removed all the mediaeval ideas from the mind of the people and it fostered a spirit of adventure among the people of Europe to explore unknown distant lands in various parts of the world.

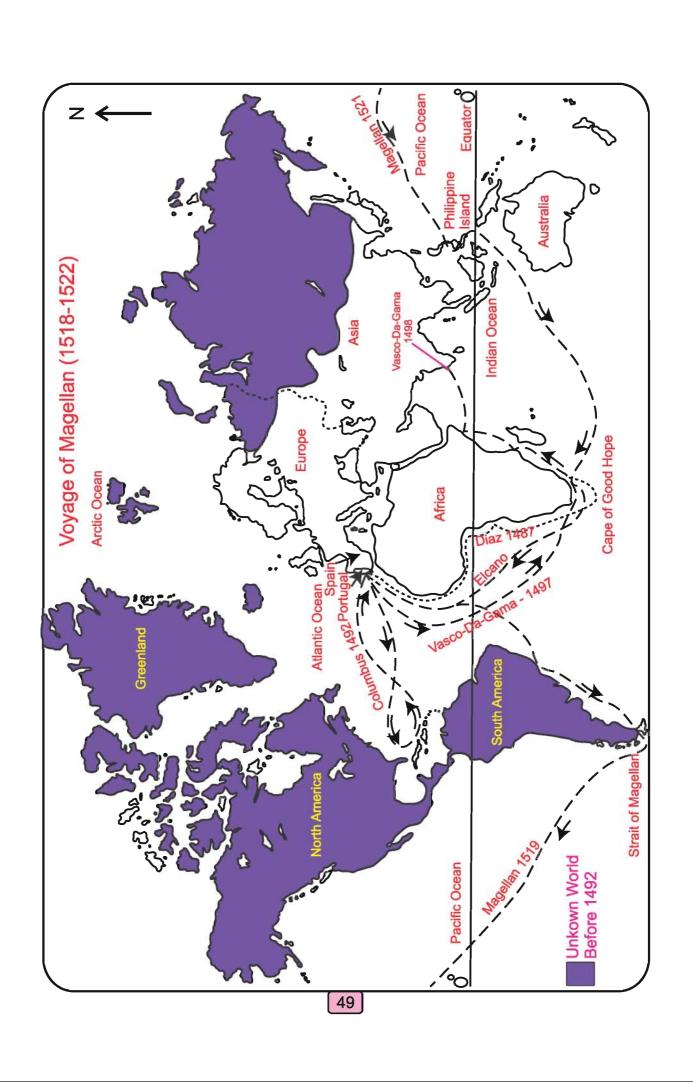
Knowledge about Earth

During this period the scientists discovered that the earth is spherical in shape. So the sailors concluded that they might return to the same point from where they began their journey. It encouraged them for voyages.

In the beginning of the modern era the scientific inventions contributed a lot. Among all these inventions, the invention of Mariner's compass was the most significant one. It is an instrument meant for knowing the directions. Its needle always points towards north. It saves the people at sea especially to



15th century ship



the south of Equator from being lost and people dared travel to distant places due to correct knowledge of geographical directions.

In the 15th century after occupation of Canary Islands, the Portuguese began to make efforts to explore the western side of Africa. The Portuguese Prince Henry made great efforts in this direction, hence known as Henry the Navigator (1394-1460). He started a school for navigators and encouraged extensive exploration. The sailors were taught how to make use of the Mariner's Compass and astrolabe. His sailors undertook many voyages along the coast line of West Africa. They discovered Azores and Madeira Islands and went as far as Sudan and Senegal.

After the fall of Constantinople in 1453 to the Ottoman Turks, it had become impossible to travel to Asia from Europe. It endangered the spice trade of the Europeans; Until then the Arabs were the intermediaries in spice trade. Hence the Europeans had to search new sea routes in order to reach Asia and to amass wealth as much as possible. They sought royal patronage to undertake long voyages to find out new routes to India and Cathay (China)

The geographical imagination of Europe was enormously stimulated by the Mongol conquests. The desire for foreign travel and commerce was greatly encouraged by the crusaders. The overland journey of a small party of Venetians, of which Marco polo's travel to Cathay (China) by the end of the thirteenth century was a bold undertaking.

Remarkable discoveries were made during the second half of the 15th century. Bartholomew Diaz a

Portuguese, reached the southern most tip of Africa, which came to be called the 'Cape of Good Hope'. In 1497, Vasco da gama, a Portuguese explorer, sailed across the Indian Ocean and reached Kerala's coastal town of Calicut in 1498. His discovery of new sea route to India was a remarkable achievement.



Vasco da gama

Christopher Columbus, was an Italian but his voyages were financed by the Queen of Spain. He was the first to sail across Atlantic Ocean in 1472, with three ships—The Santa Maria, the



Columbus

Nina and the Pinta with 88 crew members. He reached America on 11th October 1492 after great difficulties. This was the most significant discovery of Columbus and it came to be known as 'The New World'.

Fernando Cortez, a Spanish adventurer made an expedition to explore the coast of Central America and discovered Mexico. Peru surrendered to Pizarro in 1530. Both Mexico and Peru caused a steady stream of gold and silver to flow across the Atlantic to Spain.

Ferdinand Magellan, a Portuguese in the service of Spain, reached and named the Pacific Ocean.

Amerigo Vespucci, Italian adventurer, made four voyages to the region visited by Columbus. He gave a detailed description about the land and its people.

Martin Wald Muller, a German cartographer was drawing a map of the world and he named the New World as America after Amerigo Vespucci.

Both Portugal and Spain, for the commercial prosperity and imperialism divided the world between them with the help of Pope. Africa, Asia and Brazil were given to Portugal and Spain established the control over parts of Northern and Southern America and Spaniards poured there in great numbers, in search of gold and silver. Spain amassed a lot of wealth. It lured the other countries of Europe to establish their colonies in the New world. France, England and Holland were prominent among them. Therefore, all the countries began to fight among themselves for territories in American Continent.

EXERCISE

I) Choose the correct answer.

- 1) Which was the birth place of Renaissance?
 - a) Italy
- b) Germany
- d) Austria c) England
- 2) Who was responsible for Reformation?
 - a) John Huss
- b) Martin Luther King
- c) Zwingli
- d) Calvin
- 3) In which year Constantinople was captured by the Turks?
 - a) 1452 A.D.
- b) 1553 A.D.
- c) 1453 A.D. d) 1353A.D.
- 4) Who painted the famous painting 'Mono Lisa'?
 - a) Micheal Angelo
- b) Raphael

c)Titian

- d) Leonarda da vinci
- 5) Who founded a religious order society of Jesus?
 - a) Martin Luther
- b) Charles-V
- c) Ulrich Zwingli
- d) Ignatius Loyala

6) in which year Vasco da Gama reached Calicut?

a) 1498

b)1497

c)1496

d)1499

II) Match the following.

Dante Father of modern science
 Michael Angelo New scientific invention

3) Friar Roger Bacon America

4) Mariner's Compass Last Judgment5) Amerigo Vespucci Divine comedy

Last supper New sea route

III) Write Short Answers.

- 1) What are the two broad divisions in the Renaissance movement?
- 2) Write a short note on Paintings.
- 3) What was the important scientific invention during Renaissance period?
- 4) Define Renaissance.
- 5) Write a note on indulgence.
- 6) The council of Trent Define.
- 7) Give an account on Henry the Navigator.
- 8) What were the effects of new voyages?

IV) Answer all the questions given under each caption.

1) Renaissance in Italy

- a) Which is the school of Europe?
- b) Who was the first great Pioneer of classical art?
- c) Who was the doctor of Charles V, wrote seven books?
- d) Who was noted for his mastery of colour?

2) Reformation

- a) What was the immediate cause of the Lutheran revolt?
- b) Who were called 'Protestants'?
- c) What were the Sacraments reduced from seven to three?
- d) Who was Johann Tetzel?

3) Society of Jesus

- a) Who founded the society of Jesus?
- b) In which year it was founded?
- c) How many members (Jesuits)enrolled in the society of Jesus?
- d) Who were the agents in propagating the counter Reformation?

4) New discoveries

- a) Who named Cape of Good Hope?
- b) What was the name of Christopher Columbus discovery?
- c) What were the name of the Christopher Columbus's three ships?
- d) Which Portuguese explorer named Pacific ocean?

V) Answer in a Paragraph.

- 1) write a paragraph on Humanism during the Renaissance period.
- 2) What were the Results of the Renaissance?
- 3) What was the services of Martin Luther against corrupt practice of the Roman Catholic Church?
- 4) Write a note on 'The inquisition' and 'Index'.
- 5) What were the causes for the Geographical discoveries?

5. THE INDUSTRIAL REVOLUTION

The Industrial Revolution which took place in England fundamentally changed the industrial, commercial, political and social life of the western world. The term Industrial revolution refers to the shift from an agrarian, handicraft, labour intensive economy into one dominated by machine manufacturers, factories and a free flow of capital. The capitalist procured raw materials and supplied artisans and craftsmen who manufactured products in their houses. New inventions were taking place in different areas, which gave birth to machines. The term Industrial Revolution is used to express the change which was responsible for the adoption of system of making things on large scale in factories. The machines changed the entire method of production. The revolution was completely economic in nature. There was no violence, no bloodshed, it was a peaceful process of industrial transformation. The French writer Blanqui first coined the term Industrial Revolution.

Factors responsible for Industrial Revolution

In the 18th century many innovations in agricultural methods and organizations had brought a reaching changes. The traditional patterns of farming were breaking up. Agriculture became more and more capitalist enterprise. Peasants freed from manorial obligations joined the ranks of entrepreneurs and tenants. The demand for English goods went on increasing. The expansion of commerce was the result of the discoveries of new lands and new sea routes. The population in European

countries expanded rapidly for several factors. More efficient agriculture and better food distribution reduced malnutrition which meant more births. The progress of science revolutionised the method of production. These conditions and many natural advances were favourable for the beginning of an Industrial Revolution.

The widespread production of rural handicrafts provided the foundation for the rapid expansion of trade. This expansion resulted a search for new markets. The capitalists encouraged the scientists to invent machines. Further the European countries exploited the colonies and their exploitation gave birth to capitalism. The capitalists wanted production of more goods in order to gain more profits and for this they required factories. With the help of newly invented machines the people produced goods on large scale. These factors helped the fast industrial changes in Europe. Before Renaissance scientific knowledge was not put into practice. But now there was awakening all around.

England in the 18th century was in a most favourable position for an Industrial Revolution. It had become the leading maritime and colonial power of the world. Her colonial and naval supremacy provided incentive for the development of the industry as the colonies provided raw materials as well as markets. Britain also possessed many natural advantages, her coastal line and climate promoted trends towards industrialisation. The role played by private enterprises in England's economic development was

extraordinary and unique. The engines of industrial revolution made England so rich and powerful. Many Protestant artisans of Spain and France migrated to England due to religious persecutions. The English government provided them shelter and monetary help and in return made full use of their skills. It gave impetus to industries in England.

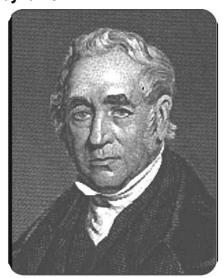
Scientific Inventions and Technological Developments Revolution in the Textile Industry

The industrial revolution brought a change from handicrafts to machine manufacture and from human or animal power to other forms of energy such as steam. The cotton textile industry was the first to gain momentum from the outburst of inventions. John Kay's (1733) "Flying Shuttle" speeded up the process of weaving and thus increased the demand for thread. James Hargreaves's "Water Frame" and Crompton's "Spinning Mule" (1769) supplied the demand for thread. Cartwright's "power loom" (1754) improved weaving methods. Whitney's "cotton gin" (1793) made a large and cheap supply of raw cotton for spinning. Elias Howe invented the "sewing machine" (1846).

Invention in Powers

The most important invention of the Industrial Revolution was the steam engine. James watt studied Newcomen's steam engine and invented a new steam engine in 1769. Steam replaced horse and water power in the textile industry. George Stephenson invented steam locomotive engine in 1825. In 1830 the first passenger railway between Manchester and Liverpool was operated. The steam printing press in

1814 decreased the cost of printed materials. Later on Faraday invented the dynamo.



George Stephenson



James Watt
'An Improver of the Steam Engines'

Abraham Derby made experiments in the substitution of coke from charcoal for smelting iron ore. In 1760, John Smeaton improved the "Derby process" by the addition of water power. Humphrey Davy invented the miner's safety lamp which enabled the miners to do the work with safety. In 1784 Henry Cort introduced the pudding process for the purification of pig iron. In 1855, Bersemer invented a

new method of making steel. From this time onward coal and iron went hand in hand with steam as foundation of industrialisation.

Revolution in Transport

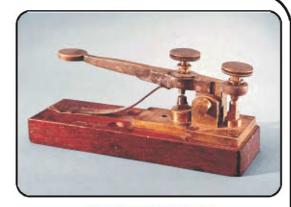
Changes in mining, metallurgy speeded changes in other industries especially transportation and communication. John Metcalfe and JohnMcAdam made tremendous improvements in road making. McAdam devised the method of making pucca roads, which were called "macadamised" roads. John Brindley constructed a network of canals and important towns like Birmingham, London, Liverpool, Manchester, etc., were soon linked by canals.



Steam Engine

Revolution in the means of Communication

'Sir Rowland Hill' invented the "penny post system" by which the business people were able to carry on their correspondence with customers and clients from far and near. Morse invented the method of sending messages through telegraph wires. In 1835 the first electric telegraph came into existence.



Electric Telegraph

Revolution in Agriculture

The revolution in agriculture had started before the industrial revolution. New farm machinery included the steel plough and harrow for breaking the ground, the mechanical drill for seeding and horse drawn cultivator to replace the hoe. There were also machines for reaping and threshing. The practice of crop rotation was adopted to maintain soil fertility. Clover is one of the plants which add fertility to the soil. Land owners in England began to enlarge their farms. The strips that lay scattered about the village were so consolidated that they could hold all their lands in one piece thereby increasing the production.

Effects of Industrial Revolution Social Effects

The Industrial Revolution left a deep impact on all sides of the European life. The changes in agricultural production, business organisation and technology had revolutionary effects in society and politics. People were drawn from the country side into cities, it gave rise to a number of industrial towns. The overcrowded towns lacked the barest sanitary amenities. Air pollution, water and noise pollution affected the health of people. The Industrialists found more profitable to employ women and

children in their factories. Mass underemployment became one of the greatest social problems. It also destroyed the old division of the society and created two distinct classes, the 'capitalists' and the 'labours'. The division of people into 'haves' (rich) and "have not's" (poor) became pronounced. As industries developed in many of the European countries, they were forced to set up their colonies in other continents to get direct raw materials and to sell their goods. This search for colonies led to colonial imperialism.

Political Effects

The emergence of big towns necessitated parliamentary reforms. A number of parliamentary reforms were introduced. The factory acts were passed in 1819,1833 and 1847 to improve the conditions of labourers and to give them protection from the exploitation of capitalists. In 1825 trade unions were organised to fight for their rights. It also gave rise to ideas of rationalism and internationalism through means of communication and transport. This also gave rise to the demand for democratic government on economic basis ie. socialism.

Economic Effects

The Industrial Revolution changed the economic face of England which became the most advanced country in the world. It developed its trade relations which increased the national income. Cottage industries could not compete with the factories and they met their natural death in course of time. The establishment of factories established many new industrial towns like Manchester, Lancashire, Birmingham and Sheffield. The birth of new classes Capitalist and Labour

made the poor poorer and the entire capital of the country went to the coffers of the capitalist. It was therefore as someone said "The Industrial Revolution made the rich richer and the poor poorer".

New Idealism

The Industrial Revolution gave birth to many political terminologies which are frequently used. Capitalism was born out of mass production of goods which led the owners of the big industries amassing wealth. The large scale factories began to develop mercantile capital, this was the beginning of capitalism.

Socialism

The slogan of socialism was raised by the labour classes against capitalism. The motive behind socialism is that there should be just distribution of wealth and the gap between the rich and the poor. Nobody should starve and everybody's need must be met. Industrialisation sharpened the distinction between the middle class and the labouring class. Socialistic demands were meant to narrow this gap. Robert Owen was the first person to coin the word "socialism".

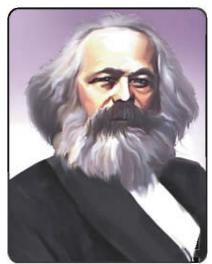


Robert Owen

Inventions during the Industrial Revolution			
INDUSTRY	NAME	INVENTIONS	YEAR
1.TEXTILE	John Kay James Hargreaves Richard Arkwright Samuel Crompton Edmund Cartwright Eli Whitney Elias Howe	Flying Shuttle Spinning Frame Water Frame Spinning Mule Power Loom Cotton Gin Sewing machine	1733 1769 1769 1769 1754 1793 1846
2.STEAM	Thomas Newcomen James Watt George Stephenson	First steam engine Redesigned Newcomen's steam engine. First Iron ship First Locomotive called Rocket	1763 1769 1790 1813
	Robert Fulton Robert Stephenson	First Railway Steam Boat called Clermont Flying Rocket Steam printing Press	1825 1807 1829 1814
	Faraday	Dynamo	1831
3.Iron and Steel	Abraham Derby John Smeaton Humphrey Davis Henry Cort Bersemer	Substitution of coal from charcoal Improved Derby Process Safety lamp Pudding process for purification of iron Method of making Steel	1760 1816 1784 1855
4.Transport	John Metcalfe John McAdam John Brindley	Road making Macadamised Roads Networking Of Canals	
5.Communication	Sir Rowland Hill Samuel Morse	Penny Post system Sending messages through telegraph wires. First electric telegraph	1835 1836
	Cyrus W field	Trans Atlantic under Sea Cable Connectivity	

Marxism

Marxism is a theory developed by Karl Marx who is a socialist of Germany. His theory is based on the assumption that production and physical forces have an intimate relationship, and the surplus value of products should go in favour of the working class. The industrial revolution gave birth to Marxism and philosophies which are sufficiently advanced these days.



Karl Marx

Theory of Laissez-Faire

It was a result of Industrial Revolution that the theory of Laissez-Faire or "free trade" came to the forefront. By this theory capitalist and traders pleaded that the state had no right to interfere in the affairs of the factories and trade.

Defects of The Industrial Revolution

Due to Industrial Revolution man became the slave of the machines. The owners of the factories ruthlessly exploited their employees. The hour of work in the factory varied between fourteen to sixteen hours a day. The women and children were employed at low wages and also required to work on dangerous machines, it also created serious problem of under employment. The people began to live unnatural life.

The Industrial Revolution had both good and as well as evil effects. But it is undoubtedly clear that these effects were far reaching. Davies says, "The Industrial Revolution was not however an unmixed blessing. The domestic system of industry which it brought to an end was in many respects more conducive to the happiness of the workers." It bestowed great material benefits to mankind. In brief the Industrial revolution has made the modern world what it is today.

EXERCISE

I) Choose the correct answer.

1.	During Industrial Re	evolution Prod	uction became	.
	a) faster	b) slower	c) very slow	d) no change
2.	2 is the birth place of the Industrial Revolution.			n.
	a) USA	b) France	c) England	d) Germany
3. Great Britain is an				
	a) Peninsula	b) Island	c) Desert	d) Mountain

- 4. Cotton gin was invented by _____.
 - a) James Hargreaves
- b) Eli Whitney
- c) Samuel Crompton
- d) Elias Howe
- 5. In _____ the First Passenger Railway was operated
 - a) 1830
- b) 1850
- c) 1779
- d) 1900

II) Match the following.

- John Kay
 James Watt
 Dynamo
- 3. Faraday Flying Shuttle
- 4. MC Adam Spinning
- 5. Humphrey Davy New Steam Engine

Safty Lamp Cotton Gin

III) Answer all the questions given under each caption.

1. Textile Industry

- a) What was the first Momentum from the outburst of Invention?
- b) By whom flying shuttle was invented?
- c) Who invented sewing Machine?
- d) When was cotton Gin invented?

2. Invention in Powers

- a) Who invented a new Steam Engine in 1769?
- b) By whom safety lamp was invented?
- c) What did Bersemer invented in 1855?
- d) Who introduced the Pudding process for the purification of pig iron?

IV) Answer Briefly.

- 1. What is meant by 'Industrial Revolution'?
- 2. What were the results of the expansion of Commerce?
- 3. Write a note on Revolution in Agriculture
- 4. What is the motive behind socialism?
- 5. Who is Karl Marx? What was his Theory?

V) Answer in Detail.

- 1. What were the Causes for the Industrial Revolution?
- 2. What were the effects of the Industrial Revolution?
- 3. Mention some Important scientific Inventions were made during Industrial Revolution.

6. THE FRENCH REVOLUTION (1789)

"When France catches cold entire Europe sneezes"

Monarchial absolutism received a death blow at the end of the 18th century from the French Revolution of 1789. This was a revolt against absolute monarchy and class privileges. It has rightly been said that the dominant forces at work in the social and political history of Europe in 19th century were the ideas or principles inherited from the French Revolution. These are mainly three—"Equality, Popular Sovereignty and Nationality". It is an irony that the French Revolution ultimately led to the despotism of Napoleon Bonaparte.

Causes for the French Revolution Ancient Regime

The absolute monarchy in France became weak and unpopular during the reign of Louis XV and Louis XVI. They were weak, incompetent and devoted to extravagance. The unhealthy interferences from queens especially Marie Antoinette created confusions and disorder. Bulk of the state's revenue was spent on the extravagance of the court. The ministers and officials were corrupt and dishonest. The state suffered seriously from this mal administration.



Louis XVI



Queen Marie Antoinette

Absolutism

The French system of absolute monarchy was rooted in the "Divine Right Theory of Kingship". The church supported this theory. Under this system, the people had no freedom for redressel. The only traditional representative body flourished earlier was the "States General". It was a tricameral body consisting of a chamber for clergy, another for nobility and the third one for the commoners. This was only an advisory body but that too was not convened since 1614. Another body known as parliament was entrusted with the responsibility of registering king's edicts. But that parliament too was ignored by the court. Hence, there was no forum through which king could gain acquaintance with people's issues

Economic Reasons

Feudalism was decaying. The nobles who owned large tracts of lands practised absentee land lordism. They left their lands under the care of petty officials and settled in the capital, so as

to gain proximity with the king. Their officials mismanaged the lands and exploited the peasants. The nobility were exempted from many taxes and compulsory labour. At the same time, they collected exorbitant dues from the peasants and held tight control over their produce. They could even award punishments to the disobedient peasants. Similarly, 1/3 of lands in France were held by clergy. They too enjoyed exemptions from most of the taxes. At the same time they used to collect Tithes and other dues from the people. The peasants were thus exploited by the state, nobility and clergy.

The burden of most taxes fell on the peasants. They were coerced to render free manual labour to the state, nobility and clergy. Dissent was punished with the repressive measures. The French colonies at that time were not prosperous enough to support the French government and the traditional industries could not make any progress. There were poverty, and starvation deaths every where.

The Catholic church enjoyed absolute sway over the French Society. It registered births and deaths, regulated marriages, controlled education and determined the moral standards. The church became owner of vast tracts of land, and enjoyed exemptions from taxes, military service and manual labour. They joined with the king and nobility against the interests of poorer sections of society. Corruption and moral degradation made the church unpopular.

The burden of wars

Since the days of Louis XIV, France was involved in incessant

warfare with other European nations. The seven years war and Austrian war of succession had emptied the French treasury. At the same time, France did not gain anything from these wars. These expensive wars led to financial crisis in France.

Role of Philosophers

The French Revolution was inspired by the thought and writings of the eminent philosophers of the day. Of them Voltaire, an internationally famous writer raised his voice against superstitions and church. He was honoured by king Fredrick the Great of Prussia for his writings. Rousseau repudiated the "Divine Right theory of Kingship" through his "Social Contract" Theory. His social contract (book) became the Bible of the Revolution. He emphasized that people's will was the basis of the state and man was entitled to "Liberty. Equality and Fraternity". Montesquieu held absolutism responsible for the miseries of the people. He suggested the English model of separation of powers as a constitutional remedy for a welfare government in his book, "The spirit of Laws". There were a group of thinkers known as physiocrats who suggested economic remedies. Such ideas influenced and inspired the leaders of the French Revolution.



Rousseau



Montesquieu

Immediate cause

The drought and famine prior to 1789 worsened the conditions and that resulted in the outbreak of "bread riots". The court especially the Queen Marie Antoinette was insensitive to the people's plight and provoked it further by their indiscrete remarks. At the same time, the French volunteers who took part in the American war of independence returned to France with a new zeal. They were inspired by the American success and their experiments with "Republican system". They joined with the rioting people and strengthened the ranks of the revolutionaries.

Convening of States General

The French king could not bring out fiscal reforms due to resistance from his court. He was in need of more revenues. In order to secure people's consent for more levies, he decided to revive the "states general" after 175 years. This states general consisted of three divisions one representing the nobility and the second representing clergy and the third representing the people.

Course of the Revolution (1789-1799)

Once the states general was convened by Louis XVI the House of the people urged the king to combine all the three Estates representatives in one chamber. They also wanted to rename the combined Estates General as "National Assembly" and demanded the repeal of all special rights and privileges granted to the nobles and clergy. Though the Third Estate (House of Commoners) had more members than the I Estate (Clergy) and the II Estate Nobles, the voting system was not favourable to the III Estate. The system of "One vote for One Estate" have been practised until then.

Voting System

I Estate II Estate III Estate

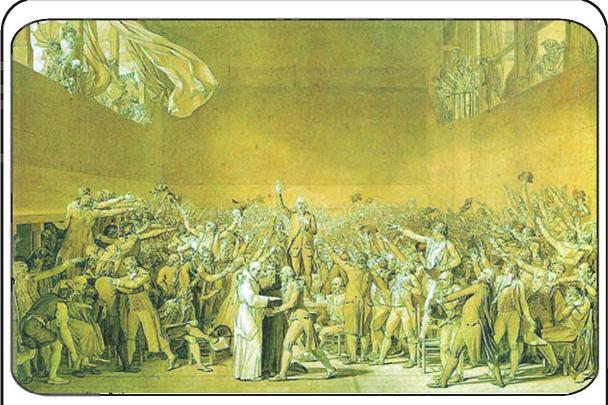
Ivote Ivote Ivote

Always the first 2 estates got majority over the 3^{rd} estate, (1+1) = 2 against 1.

Tennis Court Oath

The king did not permit them (the third estate) in the old hall on the pretext that it was undergoing repairs. So, they assembled in a nearby "Tennis Court". After a few nobles and clergy joined them, they declared themselves as the National Assembly. They took a pledge that they would not disperse till they made a new Constitution to limit the powers of the king. This was called the famous "Tennis Court Oath".

The king was clear that he could not get financial sanction from the people. He secretly planned to dissolve the National Assembly. The angry people came to know about this and broke up in open revolt against the king and monarchy.



"Tennis Court Oath".

Storming of Bastille

The unruly mob in Paris stormed a medieval fortress – "Prison of Bastille" on July 14, 1789 which was a symbol of "royal despotism". When the Swiss guards tried to prevent their entry, the unruly mob chopped off their heads, entered the prison and released the prisoners. Then they celebrated the day as the "Day of Liberty" for the whole nation.

The "Siege of Bastille" was a significant incident in the course of the French Revolution. The royal power was weakened. Then the revolutionaries established their own government called the "Paris Commune".

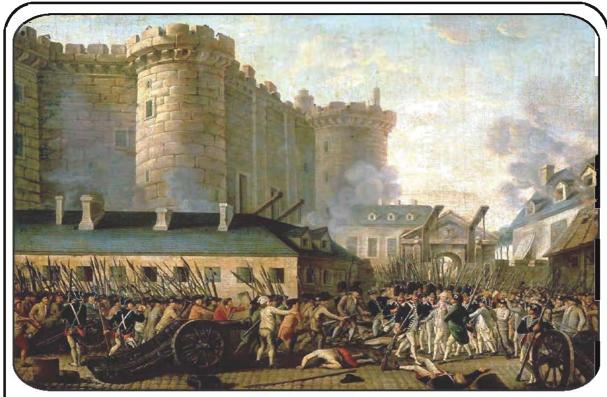
Hungry women of Paris marched to the royal palace of Versailles and demanded bread. When there was no proper response, the mob entered the palace and ransacked it. They forced the king, queen and their children to live in Paris.

National Assembly

In the meanwhile, the National Assembly was summoned and the famous "Declaration of the Rights of Man and the Citizen" was drafted on 12th August 1789. It is a very important document like that of the "Manga Carta or Glorious Charter" of England (1215 A.D.) and the "Bill of Rights" passed by the British Parliament in 1689 A.D.

Civil Constitution of the Clergy

The National Assembly began to draft the New Constitution for France in 1791. It reduced the powers of the king. Hereafter, laws were to be made by the Legislative Assembly. Religious toleration was assured. The church property was nationalized. Henceforth, the church officials were to be



"Siege of Bastille"

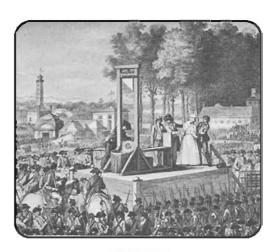
appointed by the government. The salaries of the higher church officials were reduced and that of the lower order slightly increased. The civil constitution of the clergy hurt the feelings of devout catholics since it transferred the control of the church from the "Pope to the hands of the State". The Pope condemned the civil constitution. The Assembly insisted all church officials to take an oath of loyalty to the state. So the clergy split into two groups namely juring and non-juring clergy. The state supported the former and devout catholics the latter. This resulted in the confrontation between the church and the state.

The king (devout catholic) was unhappy over the civil constitution. But he was forced to sign the new constitution.

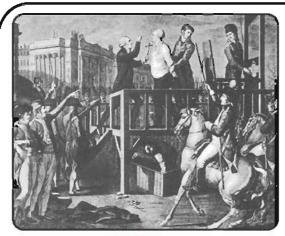
King's flight to Versailles

In June 1791, King Louis XVI attempted to flee the country with his

family but was caught at the border town of "Varennes". He was imprisoned and finally tried for treason, found guilty and executed before the public on January 21, 1793 by a cruel device called "Guillotine". Later Marie Antoinette and other royal followers were also guillotined. Again anarchy prevailed in France.



Guillotine



Guillotine



Guillotine

Guillotine was an instrument for beheading, consisting of a heavy blade dropped between two grooved uprights. It was named after J.I. Guillotine, who advocated it.

Reign of Terror

The National Convention which met in September 1792 began to draft a new constitution. It abolished monarchy and declared France a "Republic" on September 21, 1792. It established a Committee of Public Safety which was headed by the extremist leaders like Danton and Robespierre. These leaders enjoyed unlimited authority. Their period in France from September 1792 to July

1794 came to be called "Reign of Terror". Thousands of nobles and innocent men who had supported monarchy were guillotined. This led to the downfall of the revolutionaries. The "reign of terror" came to an end with the execution of Robespierre on the guillotine in 1794.



Robespierre

The Directory

The moderate elements in the National Convention framed a new constitution for France in 1795. A "Directory" of five persons advised by a legislative body of two chambers ruled for five years from 1795 to 1799. They also failed to give a good administration for France. When there was royalist uprising in Paris against the new constitution troops were ordered to crush it. Thus the French Revolution came to an end.

Napoleon Bonaparte

A Corsican youth named "Napoleon Bonaparte" took charge of the command. After a "Whiff of grape — shot, he dispersed the unruly mob and captured power for himself. This young officer who was called the "Child of French Revolution" or "Product of

French Revolution" ruled France efficiently from 1799–1815. He reorganized the system of administration and gave France political stability after a chaotic period of revolution till his defeat at "Waterloo" in 1815.



Napoleon Bonaparte

Results of the French Revolution

The French Revolution of 1789 brought about far reaching changes. It inaugurated a new era in the history of mankind. The significant results of the French Revolution are listed below.

- 1) It abolished absolute monarchy and established a constitutional monarchy.
- 2) It destroyed feudalism and liberated the serfs.
- 3) The nobles and the church lost their property and their lands were distributed to the poor peasants.
- 4) Separation of the state and church in 1794 was brought about, and the concepts of secular government and secular legal system were introduced.
- 5) Slavery was abolished in the French colonies also.

- 6) The education system was built on secular foundations.
- 7) It created national feelings and unity among the French people which was admired and followed later by the people of many countries in their struggle for freedom (e.g.India).
- 8) The French Revolution created a spirit of nationalism in Italy and Germany to achieve their unification against the foreign powers in the 19th century
- 9)The French Revolution spread the ideas of "Liberty, Equality and Fraternity not only in Europe, but also in many other countries of the world.
- 10) It proved to be the fore runner for the coming up of a new democratic and social order in Europe and elsewhere.
- 11) It gave to the world an efficient administrator Napoleon Bonaparte.
- 12) The out break of the French Revolution came like Manna from Heaven.

Do you know it

The Eiffel Tower was built for the International Exhibition of Paris of 1889 commemorating the centenary year of French Revolution of 1789.



Eiffle Tower

Do You Know

Until the French Revolution "The French People were more a Christian than a Citizen".

Abraham Lincoln of U.S.A. and Mahatma Gandhi, the "Father of our Nation" were very much inspired by the ideas of French Revolution

EXERCISE

I) C	hoose the corre	ect answer.				
1) The French Revolution took place in the year						
	a) 1749	b) 1759		c) 1779	d) 1789	
	2) "States General" was the Parliament of					
	a) England b) France			c) Russia	d) Italy	
	3) "Social Contract" was written by					
	a) Voltaire b) Rousseau		u	c) Montesquieu	d) Danton	
	4) During the Fr	ench Revolu	tion the	on the king of France was		
	a) Louis XIII	b)Louis XIV		c) Louis XV	d) Louis XIV	
	5) The	was the s	symbol	of "Royal Despotism	n" in France	
	a) Prison of V	/ersailles	b) Pri	son of Bastille		
	c)Prison of B	erlin	d)Pri	son of Varennes		
6) The "Reign of Terror" came to an end in						
a) 1790 b) 179		'91	c) 1792	d) 1794		
	7)was called		the "C	the "Child of the French Revolution"		
a) Louis XVI b) Rol		bespie	rre			
c) Voltaire d) Nap		apoleon	poleon Bonaparte			
II) N	latch the follow	ring.				
	1) The spirit of la	aws	Sep.	Sep.1792 – July 1794		
	2) Second Estate3) Third Estate4) Reign of Terror5) Directory		Volta	Voltaire		
			Wate	Waterloo		
			Rousseau Montesquieu			
6) Napoleon Bonaparte		Nobles				
		Com	Commoners			
			1795	– 1799		

III) Answer briefly.

- 1) Write a note on "Three Estates" of France.
- 2) Give an brief account on the famous "Tennis Court Oath"?
- 3) Write a note on "Declaration of Rights of man and citizen".
- 4) Write any two results of the French Revolution.
- 5) Explain the role of Napoleon Bonaparte.

IV) Answer all the questions given under each caption.

1) Absolutism.

- a) What was the French system of absolute Monarchy depended?
- b) Who supported this theory?
- c) What was the "States General"?
- d) When was it convened lastly before the Revolution?

2) Storming of Bastille.

- a) When was the prison of Bastille stormed?
- b) Which was the symbol of Royal despotism?
- c) Which day was celebrated as the "Day of Liberty" for the whole nation?
- d) Which was the significant incident in the course of the French Revolution?

3) Reign of Terror

- a) When did the National convention met?
- b) What was its declartion?
- c) Who headed the "committee of public safety?
- d)What was the period of "Reign of Terror in France?

V) Answer in a paragraph.

- 1) What were the economic causes for the French Revolution?
- 2) Describe the role of Philosophers in the French Revolution.
- 3) What were the results of the French Revolution?

7. Cultural Heritage of Tamil Nadu

In the Pre-Vedic India a Dravidian Civilization flourished with its nucleus in Indus Valley. Later with the coming of Aryans the nucleus was shifted to Peninsular India. The Tamil Language and culture are oldest surviving ones in the Dravidian family of civilizations. In the ancient Pali and Sanskrit literature the words Dramila and Dravida meant both Tamil and the Southern regions and distinguished these from Sanskritised northern region (Aryavartha).

The Tamil language and literature are noted for their antiquity. The Sangam poets like Mamulanar belonged to the age of Nandas and Mauryas i.e. 4th century B.C. Thus the present Tamil language has a continuous history of atleast 2500 years. Because of it's antiquity, versatality and it's distinct qualities Tamil language is bestowed with classical status. Unlike Sanskrit but similar to Chinese Tamil has become the oldest surviving popular language of the Indian subcontinent and eldest of the Dravidian languages of South India.

The political history of Tamil Nadu from 500 B.C to 1300 A.D is divided into three phases (1) The Sangam age (2) Kalabhra age (3) Age of Tamil empires.

During the Sangam age the political control of Tamil Nadu was divided between the crowned monarchs and petty chieftains. The Veliars were the petty chieftains ruling over hilly tracts e.g. Aay of Podiyil hills, Adhiyaman of Kudhirai hills, Paari of Parambu hills. The fertile plains of river valleys were ruled by three crowned monarchs i.e. the Chera, Chola, and

Pandya. The petty chieftains and crowned monarchs patronized scholars and poets. Some of the kings themselves were excellent poets e.g. Ariyapadai Kadantha Nedunchezhian. The rulers were engaged in wars among themselves and with others like Sinhalese, Kadambas, Yavanas and Ariyas. Cheran Senguttuvan, Karikala Cholan, Ariyapadaikadantha Neduncheziyan were a few of the prominent monarchs of the Sangam age.

The Kalabhras uprooted the Tamil Kingdoms in the second phase (3rd Century A.D.-6th Century A.D). However the Tamil literacy activities continued during their regime too. A Jain monk named Vajranandhi established a Dravida Sangha at Madurai. Achyuta Vikrantha was the most popular Kalabhra ruler who ruled from Uraiyur.

The Kalabhras were replaced by the Pallavas of Kanchi in North Tamil Nadu and the Pandiyas of Madurai in South Tamil Nadu. The Pallavas were Simha Vishnu, Mahendravarman I and Narashimavarman I built a powerful empire by overcoming the challenges from Chalukyas, Rashtrakutas and Gangas. They became patrons of Saivism and Vaishnavism and built temples for Vaishnavite and saivite deities. In the South, the Pandiyas political unity patronised the Bakthi movement.

By the end of 9th century Vijayalaya and Aditya Chola of Tanjore revived the Chola power. Parantaka I, Rajaraja I and Rajendra Chola transformed Chola kingdom in to an empire. They subdued

the Vengi Chalukyas, Pandyas, Chera and conquered the Sinhala kingdom. Rajendra sent expeditions to Bengal and Kadaram. The Cholas were ardent saivites who built many magnificient temples for Siva, of them Brahadeeswarar temple, Gangaikondacholapuram and Darasuram are noteworthy.

Extensive trade contacts were established with far off countries like Sri Vijaya and China. By the end of 13th century the revival of Pandyas at madurai and the emergence of Hoysalas of Dwarsamudra led to the decline and fall of the Chola empire.

Administrative System

The Sangam age had monarchial governments with an absolute monarch as the head, who had no checks on his authority. However the king was amenable to the advice of wise men of his court. The King's court known as Avai. Naalavai. Manram etc consisted of ministers, generals, high officials, chief queen, heir apparent (Komahan) and junior princes (Ilango). The king had no standing army. Compulsory military service was imposed during the time of war. The royal army was categorised into four wings (a) Infantry (b) Cavalry (c) War elephant and (d) Chariots. Naval expeditions were also undertaken by Sangam kings e.g. Cheran Senguttuvan against Kadamba pirates and Karikala Chola against Sinhalese. Mandalam, Kottam, Ur were the administrative subdivisions. The village administration was carried on by assembly of elders. There was a regular system of revenue administration. Besides the loot from the wars excise, tolls, duties on salt, periodical gifts and tributes contributed to the revenues of the king. The kings especially the Pandyas and Cholas

encouraged extension of agriculture by deforestation, embankment of rivers and encouraging agrarian settlement in newly conquered regions.

During the phase of empires, the king's powers and responsibilities increased manifold. The number of ministers and officials increased. A powerful standing army including naval units was developed. A complex system of provincial administration emerged. The empire was divided into Mandalams and Mandalams into Nadus and Nadus into Kottams. Each Kottam consisted of a number of Perurs (large towns) Urs (villages) Nagarams (market towns) and Pattinams (coastal Towns). Autonomous local bodies like 'ur' or 'urar' for villages and Nattar for Nadus looked after the local administration.

The Villages endowed to the Brahmins (Brahmadeyam) were governed by the assemblies of local Brahmins. These Mahasabhas enjoyed complete freedom from external interference and exempted from regular taxes. The Chola age is known as the Golden age of the Mahasabhas. Forced labour was imposed for public works and even for building temples. Innumerable tanks, canals and reservoirs were created to increase food production.

Society

The 'Porulathikaram' in Tolkappiam describes the social conditions of the Sangam Tamils. The birth based caste and varna systems were absent among the Tamils Instead, the land based Tinai divisions were mentioned. The Tamil land was topographically divided into (a) Kurinji – hills and hilly region (b) Mullai – the Pastoral Slopes (c) Marudham – the

fertile cultivable plains (d) Neidal – the coastal or littoral region and (e) Paalai – the desert region.

The population was accordingly classified as

- i) Kuravar or Vedar of Kurinji
- ii) Idayar of Mullai
- iii) Uzhavar of Marudham
- iv) Minavar or Parathavar of Neidal
- v) Kallar of Paalai.

In the royal towns of Marudham region the people were classified as Arasar (princes) Anthanar (wisemen), Vanikar (traders) and Vellalar (agriculturists) Panar (bards), Viraliyar (dancers), Kuyavar (potters), Umanar (salt merchants), Vannar (washermen), weavers and other handicrafts-men, poets and teachers were also mentioned. Names of women poets were found revealing the access of education to women. Love marriages were approved Chastity was considered the meritorious quality of women. There were very few instances of sati being committed by widows of royal families.

The 'Caste' system received royal recognition during the time of the Pallavas. The Brahmins were now given the highest status in the society. They emerged as religious leaders, political and social advisors and ultimate authority in legal issues. They were given land grants and tax concessions. All other castes were treated as Sudras. Untouchability became a menacing factor, these landless tillers were deprived of education, offices and access to temples. In the last phase of the Chola empire there emerged two groupings of castes; Valangai and Edangai which

led to Social tensions and regular clashes.

However it should be noted that Sangam ethical literature like Naladiyar and Thirukkural did not approve of caste. Sangam Tamils stressed more on ethical conduct than on faith and rituals. During the age of Tamil empires, the Bhakthi movement, the Nayanmars and Alwars accommodated the Vedar, Putayar and Parayar as Bhakthas, yet they did not argue for their access to education, offices and temples.

Sangam literature

The Sangam literature, composed by poets belonging to different social segments including women, was secular in character and did not claim divinity. The Sangam literature includes Tolkappiam, (a grammar work) Ettuthogai, Pathupattu, Pathinen Keezh Kanakku and the two great epics Silapadhikaram and Manimegalai. War and love are glorified in Ettuthogai and Pathupattu however most of the Pathinen Keezh Kanakku works were on morals. The 18 Minor works, 5 major epics (Silapadhikaram, Manimekalai, Kundalakesi, Valayapathi and Seevaga sinthamani) and 5 minor epics (Neelakesi, Sulamani, Udayana Kumara Kaviyam, Yasodhara Kaviyam and Nagakumara Kaviyam) epics and grammatical works (Pingala Nigandu Yapperumkalam) were produced during the Kalabra period. During the age of empires, Bhakti literature became abundant. Thevaram, Thiruvasakam, Divya Prabandham, Periapuranam Kambaramayanam propagated Saivism and Vaishnavism. Muvarula, Kalingathuparani, Nandikalambakam, Nannul and

veeracholiyam are some of the noteworthy secular works. Tamil studies were supported by the chola grants (Pulavara Mutrool)

Though Sanskrit was the official language during Pallava period and sanskrit studies received royal patronage only few notable Sanskrit works were produced, for example, Mattavilasaprakasanam, kirtarjuniyam, Avanti Sundari Katha and Kavyadarsam. However Sanskrit succeeded in being accepted as the language of religious rituals of the temples. Sanskrit learning of the Brahmins were supported by tax free land grants (Bhatta Vritti and Veda Vritti)

Religion

The religious practices during Sangam age were Tinai based. The people were liberal in their religious out look and religion did not dominate socio political activities. Hero stones were worshipped, Seyon, Mayon, Vendan, Varunan, Valiyon and Kotravai were popular deities. Ganesa cult was absent. Singing and dancing (Kuravai and veriyattu) were associated with worship, offerings of flowers, grains and animals were made to deities. The Vedic vagnas of Brahmins attracted a few kings but had not become popular with the people. Jainsim, Buddhism and Ajivikaism made inroads into Tamil society during Sangam age and became very popular during Kalabhra period.

Bhakti movement gained momentum during the Pallava period. Nayanmars and Alvars carried on intensive propaganda against Jain and Buddhist. Siva, Thirumal and their consorts became important deities In the later phase of the Chola period

Murugan cult became popular. The Brahmins replaced local priests in temples and there sanskrit became the religious language. The Jains and Buddhists temples were either demolished or converted into Saivite or Vaishnavite temples. The Chola period witnessed the saivaite, vaishnavite clashes. Thillai Govindarajan idol was removed from Chidambaram temple, and the Vaishnavite Ramanuja was forced to seek asylum in Kamataka.

Virasaivism and Sri Vaishanvism raised their voice against social segregation. The Tamil Siddhars put a rational and powerful argument against caste discriminations, temple system, superstitions and rituals.



Ramanuja

Art and Architecture

The Sangam Tamils had their own system of music, dance and drama (Pann, Aadal and Koothu). The Panar and Viraliyar were professional



Five rahtas

musicians and dancers. String instruments (Yaazh) wind instruments (Kuzhal) and drums (Muzhauu) were used in such performances. Festivals and worships were also associated with dance and music (Kuravai, Veriyattu) The Pallava inscription at Kudumianmalai refers to a great musician Rudracharya.



Brihadeeswarar Temple-Tanjore

The Devaram and Divya Prabandam were set in Ragas. The Puranic themes were enacted in the form of koothu or gaathas. The Devadasis or temple servants were excellent dancers.



Valkuntha Perumal Temple -Kancheepuram

In the field of architecture the Sangam age did not produce enduring structures with the advent of the Pallavas a new style in art and architecture appeared in Tamilnadu. At first Mandapams were excavated out of

rocks with excellent sculptural representations (Mahisasura Mandapam, varaha mandapam). Then single rocks were converted into ratha like temples(monolithic rathas at Mahabalipuram). They built structural temples by filling up stone'slabs. (Shore temple, Kailasanathar temple and Vaikuntha perumal temple). These temples were noted for their Vimanas. The imperial Cholas developed this style further, elaborate campuses, protective walls, pillared halls, huge towers and multi shrines marked the Chola temple architecture. Taniore Brihadeeswaram, Gangai Konda Cholapuram and Darasuram are outstanding specimens of Chola architecture. All these temples have excellent sculptural representations. The Sittannavasal caves Kailasanathar temple and Brihadeeswarar temple have the best specimens of paintings. The Chola bronze images of Nataraja, Siva, Vishnu and other deities have earned global acclaim.

The Tamil had developed their own system of mathematics time calculation, astronomy, and medicinal systems.

The Sangam literature refers to "Enn" Kanakku Nazhigai Yamam Kaatham and Kol. They also refer to seasons as Elavenil, Elaiudir etc. References to native medicines like Elathi, Tirikadukam, Siru pancha Mulam etc reveal Tamil's versatile achievements. Kaniyans were both astronomers and astrologers. The Tamil Siddhas produced excellent treaties on Siddha system of medicine and these treaties elaborate diagnosis, treatment by herbs and chemicals and also provide pharmacological details.

To conclude with, it can be said that the Tamils had excelled in many fields

of human activity and philosophically they emphasised on a universal outlook. Their theism did not give too much room for superstitions. Like the Buddhists and Jains, the Tamils opined, that good or bad, nothing comes from others and held the view that man is the maker of his own destiny. The legacy of Tamils is a glorious chapter in Indian history.

	EXERCISI				
I) Choose the correct ans	wer.				
1) Tamil language has	a continuous history	of atleast	years.		
a) 3500	b) 2500	c) 1500	d)400		
2) The Kalabhras wer	e replaced by the	at kanch	i in north Tamil nadu		
a) Cheras	b) Cholas	c) Pandyas	d) Pallavas		
The Pallava insc Rudracharya.	ription at	refers	to a great musician		
a) Kudimian malai	b) Utherame	rur			
c) Mamandur	d) Mahendra	vadi			
4) The pallava gave im	portance to				
a) Tamil b) Tel	ugu c) Saı	nskrit	d) Malayalam		
5) descr	ibes the social condit	ion of the sang	am Tamils		
a) Manimegalai	b) Tholkappiam	c) Pathupattu	ı d) Ettuthogai		
II) Match the following.					
1) Pattinam	drama				
2) Panar	musician				
3) Koothu	coastal region				
4) Viraliar	Forest region				
5) Mullai	hilly region				
	dance				
	Plains				
III) Answer all the questio	ns given under eac	h caption.			
1) Sangam literature					
a) Name the two gre	eat epics of the Sanga	m literature?			
h) Hourmany major	h) How many major anion are there in Sangam literature?				

- b) How many major epics are there in Sangam literature?
- c) What are the Tamil works that mention the war and love?
- d) Write a note on Bhakti literature

- 2) Sangam society
 - a) Who were the people of Kurinji region?
 - b) How was the cultural regions called?
 - c) Which book throws light on the social condition of the Sangam Tamils?
 - d) What are the five Thinais?

IV) Answer briefly.

- 1) Write a note on Tamil language
- 2) Name the important temples during the Chola Period.
- 3) What were the revenues of the kingdoms?
- 4) Write a note on Kalabharas.
- 5) What is the Siddha system of medicine?
- 6) Write a note on Sangam Music.

V) Answer in a paragraph.

- 1) Explain the administrative system of the sangam age.
- 2) Write a note on the cultural contribution of the cholas.
- VI) On the outline map of South India mark and shade the the Chera, Chola, Pandya and Pallava kingdoms.
- VII) Collect the pictures of the famous south Indian Temples.

GEOGRAPHY

1. TAMIL NADU

Tamil Nadu, a state in southern India, is bordered by the states of Puduchery, Kerala, Karnataka and Andhra Pradesh. The state, lying on the southern tip of the Indian peninsula, is surrounded by the Bay of Bengal on the east, Indian Ocean on the south, Kerala and Karnataka on the West, and Andhra Pradesh on the North. The native language spoken here is Tamil which has become the official language with effect from January 14, 1958. It is the sixth most populous state of the Indian Union and a leading producer of both agricultural and industrial products.

The state extends latitudinally between 8°4′ North and 13°35′ North and longitudinally between 76°18′ East and 80°20′ East. The state of Tamil Nadu is a triangular landmass at the southeastern end of the main continent. It is the eleventh largest state in India by area (about the size of Greece).

Tamil Nadu is one of the most urbanized states of India. It is a home to many natural resources, rare flora and fauna, cool hill stations, grand Hindu temples of Dravidian architecture, beach resorts, multi religious, pilgrimage sites and few UNESCO World Heritage sites. It is one of the foremost state in the country in terms of over all development.

Administrative Division

Total area of Tamil Nadu is about 1,30,058 sq.km., which is 4 % of the total land area of India. For the purpose of administration, the state has been

divided into 32 districts. The following table gives the names of the districts.

Table: Districts of Tamil Nadu

S.No. District

- 1) Ariyalur
- 2) Chennai
- 3) Coimbatore
- 4) Cuddalore
- 5) Dharmapuri
- 6) Dindigul
- 7) Erode
- 8) Kancheepuram
- 9) Kanyakumari
- 10) Karur
- 11) Krishnagiri
- 12) Madurai
- 13) Nagapattinam
- 14) Namakkal
- 15) Nilgiris
- 16) Perambalur
- 17) Pudukkottai
- 18) Ramanathapuram
- 19) Salem
- 20) Sivagangai
- 21) Thanjavur
- 22) Theni
- 23) Thiruchirappalli
- 24) Thirunelveli
- 25) Thiruvallur
- 26) Thiruvannamalai
- 27) Thiruvarur
- 28) Thuthukudi
- 29) Triuppur
- 30) Vellore
- 31) Villupuram
- 32) Virudhunagar

Know the facts



State Bird: Emerald Dove



State Animal: Nilgiri Tahr

Do you know?

The southernmost point of the Indian Union—"Indira Point" got submerged under the sea water in 2004 during the Tsunami.

Table: Local bodies of Tamilnadu

City Corporations	10
Municipalities	125
Town Panchayats	529
District Panchayats	31
Panchayat Unions	385
Village Panchayats	12524

Activity

Find out which of the above local bodies you belong to?

History of Tamil Nadu

Tamil Nadu has a very ancient history that goes back to 6000 years or



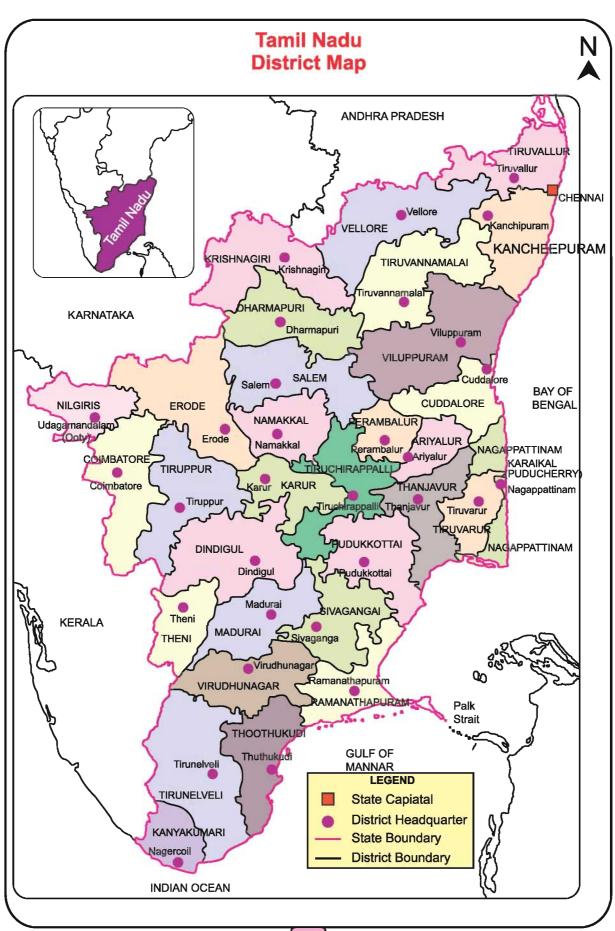
State Flower: Gloriosa Lily



State Tree: Palm Tree

so. Though the state is a home of Dravidian culture, It also acquired Aryan culture by almost a thousand years ago. It is regarded as the cradle of Dravidian culture with its cultural gear speckled all across the state in the form of magnificent temples, gateways, intricate carvings, and the society steeped in tradition.

Sangam or the Institute for the growth of Tamil language existed in three phases. The first one was at Madurai devastated by the sea and the intermediary one was at Kapadapuram and third one seated at Madurai. The Tamil language with its grammar Tholkappiyam belongs to the last sangam period. Classic works like Ettuthogai and Pathuppattu also belonged to the sangam period.



Tiruvalluvar, the author of much renowned "Thirukural" does not mention his religion, land, or the audience for his work. He is often portrayed as a holy saint of Tamil Nadu.

As Thirukural contains universally acceptable ideas and thoughts, it is regarded as the world's renowned piece of literature. Tamil which obtained the semmozhi status is the eighth one of its kind.

Tamil Nadu was once the home of four Tamil Kingdoms, namely, Chera, Chola, Pandya and Pallava. Their period was known as the golden age of Tamil Nadu during which art, music as well as trade and agriculture reached their peak.

Know the fact

The first Tamil printing press was established at Tarangambadi in Nagapattinam district by the Danish missionaries.

EXERCISE

I) Choos	the cor	rect answer.				
1. Ta	mil Nadu	is the	largest state	of India	(as regards	area)
a)	5th	b)7th	c) 9th	d) 11t	:h	
2. Th	ere are	districts	in Tamil Nad	u.		
a)	28	b) 30	c) 32	d) 34		
3	dis	trict lies on the	e east coast.			
a)	Nilgiris	b) Theni	c) Nagapatti	nam	d) Coimbato	ore
4. Ta	mil Nadu	lies in the	part of In	dia.		
a)	North Eas	st b) So	uth West	c) So	uth East	d) North West
5. Ta	mil Nadu	accounts for_	of the	total ar	ea of the cou	ntry.
a)	4%	b) 5%	c) 3%	d) 2%))	
II) Match	the follo	wing.				
1. Sta	ate bird		152			
2. St	ate Tree		234			
3. As	sembly co	onstitution	Palm tree			
4. Mu	ınicipalitie	es	West of Tar	nil Nad	u	
5. Ka	rnataka		Emerald Do	ve		
			10			
			Peacock			

III) Answer in brief.

- 1. Write down the boundaries of Tamil Nadu?
- 2. Name the local bodies of Tamil Nadu?
- 3. Mention the Latitudinal and Longitudinal extent of Tamil Nadu?
- 4. Name the oceans bordering Tamil Nadu.
- 5. Name any four districts that lie on the western margin of Tamil Nadu.
- 6. Name the coastal districts of Tamil Nadu.

IV) Answer in a paragraph.

- 1. Describe the geographical location of Tamil Nadu.
- 2. Given an account on the salient features of Tamil Nadu.

V) Mark the following on given map of Tamil Nadu.

On the outline map of Tamil Nadu, mark the following.

- 1. Kanyakumari
- 2. Indian Ocean
- 3. Bay of Bengal
- 4. Chennai
- 5. Puduchery
- 6. Erode
- 7. Pudukkottai

2. PHYSIOGRAPHY OF TAMIL NADU

Tamil Nadu has a unique physiography. To the west and the northwest it is bounded by hills of both Western and Eastern Ghats. In the east it is bounded by Bay of Bengal and in the south by the Indian Ocean. In general, the physiography of Tamil Nadu is a high land which has uneroded, western ghats on the west and low lying coastal and river plains on the east.

Physiography of Tamilnadu

Geographically Tamil Nadu may be divided into four physical divisions

- 1) The Hilly region (Western Ghats and Eastern Ghats).
- 2) The Plateau.
- 3) The Plain and
- 4) The Coastline.

The Hilly regions of Tamil Nadu

The Western Ghats enters the state through the Nilgiris District and runs up to Kanyakumari district. The Western hilly region is much more complex than the Eastern Ghats. Its average height is from 1000 m to 1500m. The Western Ghats has mountain peaks namely Doddabetta (2637 m) and Mukuruthi (2540 m). In the north west of Western Ghats lies the Nilgiri highland region at an height of above 2500 m. In this region, there are few peaks found at a height ranging from 1800 m to 2400 m. The highest peak of Tamil Nadu is Doddabetta. The Western Ghats and Eastern Ghats meet at the Nilgiri hills. From the Nilgris of Tamil Nadu and Anaimalai hills of Kerala, an offshoot runs at a height of 1500 m to 2000 m in the east. These are called Palani hills. To the south of the

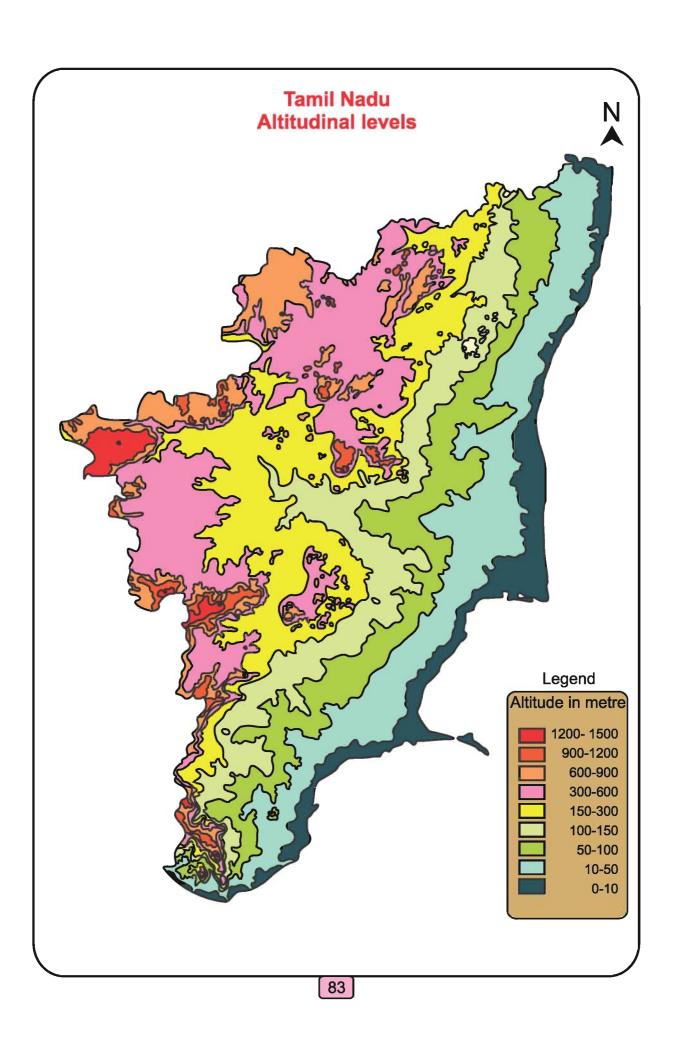
Palani hills there are two other ranges namely, Varshanadu and Andipatti hills running parallel to the Cardamom hills. Though the Western Ghats is a continuous range, it has a gap of 25 km at Palaghat. To the south of Palaghat gap, hills such as Andipatti, Elamalai and Agathiya malai are found. Kambam valley is between Thekkadi hills, Varshanadu hills and Kodaikanal hills. This Valley is considered as the green valley of Tamil Nadu. The gap in between Varshanadu hills and Agathiya malai is called the Shenkottai pass.

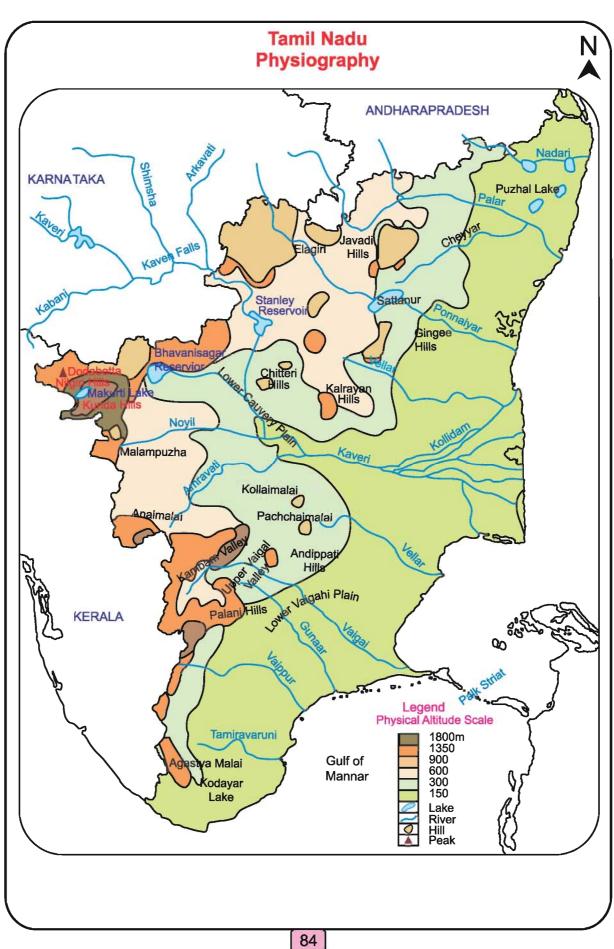
The Tamil Nadu hills separating, the plains and the plateaus have two well marked passes, namely, the Attur pass in the south and the Chengam pass in the north. This pass links the Cuddalore and Villupuram district in the plain with the Salem district on the plateau. The Palakkad gap and Shencottah gap are the only breaks in the long chain of hills that border Tamil Nadu on the west.



Western Ghats

Eastern Ghats are not continuous when compared to the Western Ghats. They are dissected into isolated hill ranges extending from northeast to southwest through the districts of Vellore, Dharmapuri and Erode. The average elevation ranges from 1100 m to 1600 m. These hillocks are called by





different names in different areas, such as;

- Javadi Hills and Elagiri Hills in Vellore District;
- 2) Shervarayan in Salem District;
- 3) Kalvarayan in Villupuram District;
- 4) Pachaimalai in Thiruchirapalli District;
- 5) Kolli hills in Namakal District;
- 6) Chitteri hills are in both Dharmapuri and Salem Districts;
- 7) Gingee hills in Thiruvannamalai District;

The highest hills of Eastern Ghats – Shervarayan (1,500 – 1,600 m).

The highest hills of Western Ghats- Anaimalai (2,700 m)

Plateaus of Tamil Nadu

The Eastern and Western Ghats meet at the Niligiris plateau. Four km from this plateau, it slopes gently downwards to about 1,800 m towards Coimbatore. It extends from the Nilgiris to Dharmapuri plateau or Bramahal plateau and lies to the west of Shervarov uplands. This plateau is found with extreme abruptness on all sides. The Bramahal plateau in Dharamapuri district is at an elevation of 300 to 700 m which merges with the Mysore plateau in the west. The elevation of the plateau increases from east (120 m) to west (300 to 450 m). Plateaus of Tamil Nadu can be grouped into two as Coimbatore plateau and Madurai plateau. In between the plateaus isolated hills are also seen. One such isolated hills are Chennimalai of Erode district.

Plains of Tamil Nadu

Plains of Tamil Nadu can be classified into two as coastal plains and

rivers plains. The coastal plains of Tamil Nadu extend from Pulicat lake in the north to Kanyakumai in the south, to a length of 1,000 km at an average elevation of 50 mt. The notable beaches found here are the Marina beach and the Rameshwaram beach.

Marina Beach

It is the second largest beach in the world. Marina Beach extends upto a distance of 13 km and it is one of the major tourist attractions of Chennai.



Marina Beach

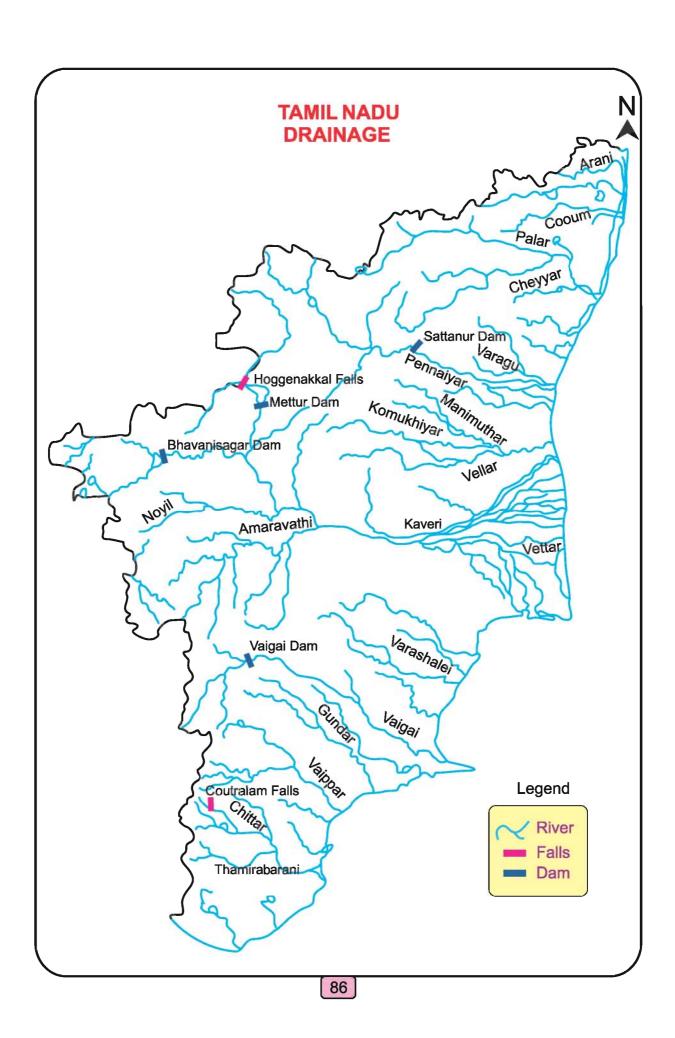
Rameswaram Beach

The beach of Rameswaram is famous for its beautiful coastal features. The sea waves rise to a maximum height of only 3 cm and the view looks like a very big river.



Beach in Rameswaram

The coastal plains of Thiruvallur, Kancheepuram, Cuddalore and Villupuram are together known as the Cholamandalam plains.



The river plains in Tamil Nadu are formed by the rivers Palar, Cheyyar, Pennar and Vellar in the north; Kaveri and its tributaries in the central region, Vaigai, Vaippar and Thamiravaruni in the south.

Rivers of Tamil Nadu

The Northern rivers of Tamil Nadu are Araniyar, Korattalaiyar, Palar, Cheyyar, Kedilam, Manimuthar and Thenpennar. Among the rivers the Palar and Pennaivar flow from head waters of Kolar Plateau towards the east. Cheyyar and Agaram are two tributaries of Palar. The main river of the state is Kaveri which originates in Kodagu district of Karnataka. Kaveri and its tributaries in its lower course drain the districts of Nagapattinam, Thaniavur. Thiruvarur and Thirucharapalli. The Kaveri, the Kollidam and the Vellar jointly drain central part of the Tamil Nadu. The head of the Kaveri delta is near the island of Srirangam. Kollidam branches off from Kaveri at Grand Anaicut (Kallanai).

In the Kaveri delta, the distributaries such as Kollidam, Manniyar, Vennar, Vettar, Arasalar, Nattar, Mudikondinar, Kudamuruti and Veera Cholanar have formed a alluvial plain in a quadrangle shape. Kaveri along with its tributaries, Bhavani, Novval. Movar and Amaravathi, is the most important source of canal irrigation. Towards the south of Tamilnadu, there are few rivers like Vaigai (Madurai), Vaippar (Virudhunagar), Tamirabarani (Thirunelveli), Gundar (Thoothukudi, Ramanathapuram), Chittar (Thirunelveli) and Kothaiyar (Kanyakumari). Most of the soils of the plains of Tamil Nadu are alluvial, formed by these rivers flowing east. In the southwest of Tamil Nadu is the Suruliyar river that drains a part of Madurai district.

EXERCISE

1100	se the con	ect an	SWEI.						
1.		hill is loc	cated in E	Easte	rn gha	ts.			
í	a) Nilgiri	b) kalr	ayan hills	3	c) Car	damon	n hills	d) P	alani hills
2.	i;	s the hig	jhest pea	k in	Tamil I	Nadu.			
i	a) Anaimudi	b) Doo	ldabetta		c) Muk	kuruthi		d) B	rahmagiri
3.	The river Cl	hittar is	an impor	tant	tributaı	ry of		riv	er.
i	a) Kaveri	b) Tam	nirabarani	i	c) Vaig	gai	d) Pal	ar	
4.	The longest	river flo	wing in Ta	amil	Nadu	is			
í	a) Tamirabaı	rani	b) Vaigai	i	c) Pala	ar	d) Kav	/eri	
5.	The Noyyal	and the	Amarava	ıthi a	re tribu	ıtaries	of		
i	a) Vaigai	b) Kav	eri c)	Pala	ar	d) Per	iyar		

II) Match the following.

1. Eastern Ghats Madurai 2. Western Ghats Karnataka 3. Kaveri river **Nilgiris**

4. Kodaikanal Shervarayan 5. Vaigai Coimbatore

Queen of hills station

Chennai

III) Answer in brief.

1. Name the important rivers of Tamil Nadu.

- 2. What are the major physical divisions of Tamil Nadu?
- 3. Mention the important hills in the Northern districts of Tamil Nadu.
- 4. Write a short notes on Marina Beach.
- 5. Distinguish between Eastern Ghats and Western Ghats.

IV) Answer in a paragraph.

- 1. Describe the plateau region of Tamil Nadu.
- 2. Write an account on the river Kaveri.

V) Mark the following on a given map of Tamil Nadu.

On the outline map of Tamil Nadu, mark and label the following.

2) Doddabetta 1) Kaveri river 3) Coimbatore Plateau

6) Agastya Malai

5) Vaigai river 7) Nilgiri hills 8) Kollidam 9) Elagiri hills

10) Kalrayan hills

4) Coromandal coast

3. CLIMATE OF TAMIL NADU

Physiography, nearness to sea and geographical location determine the overall climatic conditions of any region.

Climate refers to the sum total of weather conditions and variations over a large area in a long period of time (more than thirty years).

Weather refers to the state of the atmosphere over an area at any particular point of time.

The major climatic elements are: temperature, pressure, wind, humidity, clouds and precipitation.

Tamil Nadu has tropical climate. Two factors namely, the apparent position of the Sun and the monsoonal rain bearing winds influence the climatic conditions of Tamil Nadu. The vertical rays of Sun fall on the state twice in a year.

Though Tamil Nadu lies in the tropical region, the local weather conditions such as temperature,

humidity, clouds and wind direction along with the wind speed, change the climatic conditions to a greater extent. This is the region of climatic variation that exhibits the influence of the coastal and the interior inland locations.

Temperature of the state starts increasing in the second week of February and gradually increases in the months of March to June. The hottest part of the summer season is known as Agni Nakshatram (Star of Fire) or Kathiri veyyil. The decrease of temperature is from the second week of June to the first week of October. The month of October is the season for the retreating or northeast monsoon. From then, the temperature starts to decrease up to the month of February. In Tamil Nadu, May is the hottest and January is the coldest month. Though this is the general situation, the overall climatic condition varies among mountainous regions, plateaus, coastal and interior plains. The following table explains it clearly.

Table: Region-wise seasonal average temperature

	Geographical	Weather	Tempo	erature in Ce	Isius
S.No.	Locations	recording stations	Summer season	Winter season	Rainy season
1	Coastal regions	Chennai	40° C	22°C	25°C
2	Interior Plains	Vellore	42° C	21°C	22°C
3	Inland regions	Thiruchirappalli	42° C	20°C	23°C
4	Hilly regions	Kodaikanal	11° C	6°C	14°C
5	Plateau	Coimbatore	32° C	26° C	21°C

The relative humidity in the state, is found to be high in winter season than in summer season. The average humidity of the air is about 68 % in the month of May, whereas it is 82 % in January. The rate of evaporation is

more during the summer season than in the winter season. The state possesses thick rain bearing clouds in the months of October, November and December.

Table: Major seasons of Tamil Nadu

Seasons	Tamil Name	Tamil Month
Summer (April to August)	Illavenil Muduvenil	Chitirai, Vaikasi Aani, Aadi
Rainy (August to December)	Khar season Khulir	Avani, Puratasi Iypasi, Karthigai
Winter (December to Apirl)	Mun Pani Pin pani	Markhazhi, Thai Masi and Panguni

The rainy seasons of the state may be grouped into three

- 1) South West Monsoon;
- 2) North East Monsoon; and
- 3) Cyclonic Rainfall

Southwest Monsoon

The southwest monsoon occurs between June and September. The district that are benefitted by this season are the Niligris, Kanyakumari, western parts of Coimbatore, Dharmapuri and Salem. As the South-west monsoon starts its downpour of rain in the Western Ghats, the western parts of Tamil Nadu receive about 150 cm of rainfall, on an average. Most of the Eastern and Central parts of Tamil Nadu become rainshadow region for this season. This occurs due to the southwesterly direction of monsoonal winds in this season. In general the amount of rainfall of south west monsoon decreases from west to east. The Nilgiris district receives about 70 % of its annual rainfall followed by the Salem and Erode districts.

Kanyakumari district also receives sufficient amount of rainfall from this season.

Do you know?

The word monsoon is derived from the Arabic word 'mausim' which literally means season. Monsoon refers to the seasonal reversal in the wind direction between seasons.

Northeast Monsoon

The Northeast Monsoon season occurs between October and December. The coastal and interior plains of Tamil Nadu are highly benefitted by this rainy season. Normally, Northeast monsoonal rain is highly associated with the cyclonic formation. In this season, the amount of rainfall decreases from east to west. Excepting Kanyakumari, all other interior south and western parts of Tamil Nadu receive lesser rainfall. Coastal districts such as Chennai, Cuddalore, Thiruvallur,

Kancheepuram, Villupuram, Nagapattinam, Thiruvarur and Thirunelvelli distrcts receive about 150 to 250 cm of rainfall. Trichirapalli, Salem and Erode receives about 100 to 150 cm of rainfall.

Cyclonic Rainfall

November is the month of cyclonic rainfall. The low pressure formations in the southern part of the Bay of Bengal intensifies, the cyclonic rainfall along the coastal districts of Tamil Nadu. An equal portion of rainfall is received from both the Northeast Monsoon and the Cyclonic rainfall in the coastal districts of Tamil Nadu.

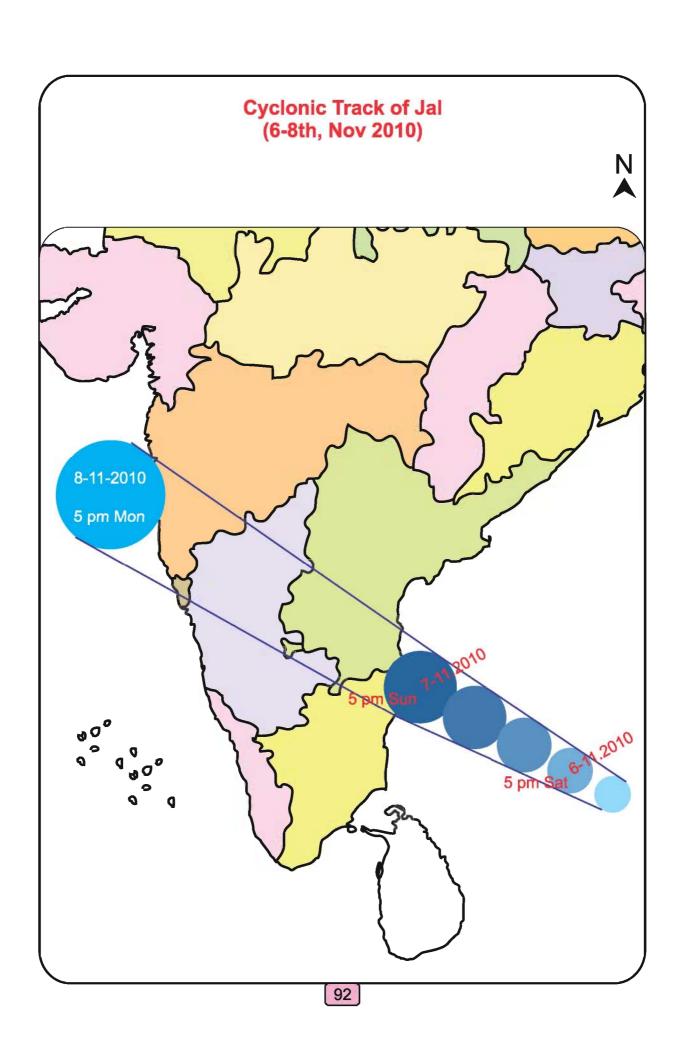
On the basis of annual rainfall received, the districts of Tamil Nadu can be grouped into 5 rainfall regions. From the table given below it is clear that the coastal districts along with Nilgris falls under the very heavy rainfall region with an annual rainfall of more than 1400 mm. Among the districts, Kanyakumari is fortunate enough to receive rain from all the rainy seasons. Very low amount of annual rainfall is received by the Coimbatore and Tiruppur districts.

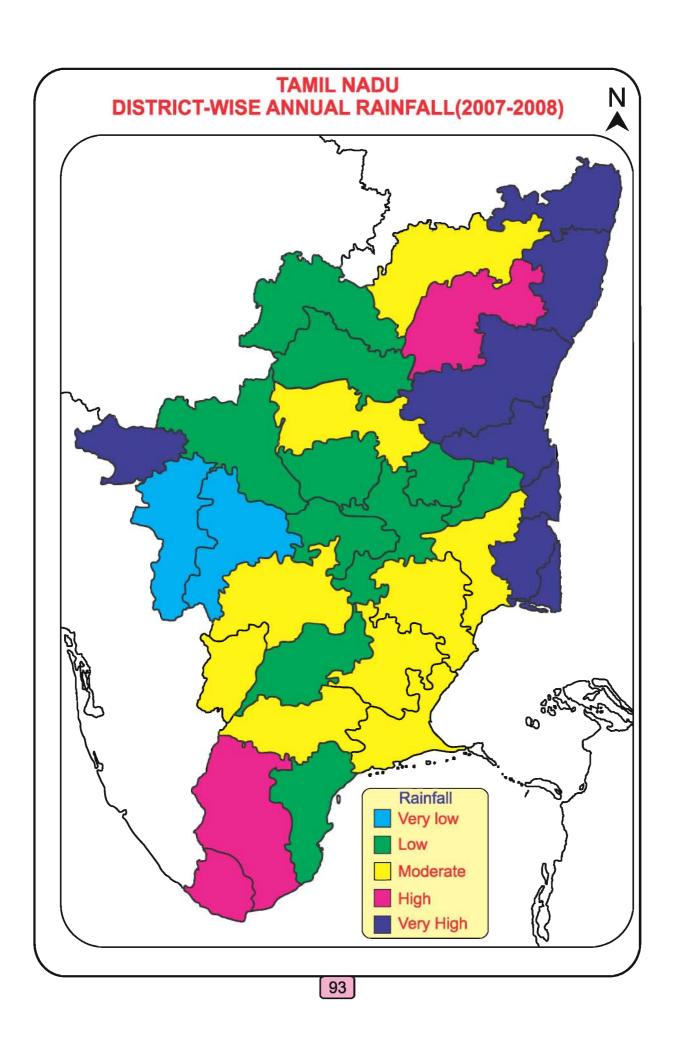
Table: Season wise percentage of annual rainfall

SI.No	Seasons	Annual Rainfall (%)
1)	South West Monsoon	22
2)	North East Monsoon	57
3)	Cyclonic Rainfall	21

Table: Rainfall Regions of Tamil Nadu Distribution of rainfall (2007-2008)

SI. No	Distribution of Rainfall	Amount of Rainfall	District
1	Very Low rainfall	Below 800 mm	Coimbatore ,Tiruppur.
2	Low rainfall	From 800 mm to 1000 mm	Namakkal, Karur, Thuthukudi, Erode, Dharmapuri, Madurai, Thiruchirappalli, Perambalur, Krishnagiri.
3	Moderate rainfall	From 1000 mm to 1200 mm	Pudukkottai, Virudhunagar, Sivagangai, Thanjavur, Salem, Ramanathapuram, Dindigul, Theni, Vellore.
4	High rainfall	From 1200 mm to 1400 mm	Thirunelveli, Thiruvannamalai, Kanyakumari
5	Very High rainfall	Above 1400 mm	Kancheepuram, Chennai, Villupuram, Thiruvallur, Thiruvarur, Cuddalore, Nagapattinam, Nilgiris.





Natural Vegetation

Vegetation that grows naturally without the effort of human beings is called Natural vegetation. Its growth depends upon the temperature, rainfall and type of soils.

According to the National Forest Policy, a region should have 33% of its land under forest. Unfortunately, Tamil Nadu has only 17% of its land under forest. In the state, forest are confined to the Western Ghats and the Hilly regions. Among the districts, the Nilgiris possesses the highest percentage of area under forest followed by Theni, Dharmapuri and Kanyakumari districts. In the coastal regions, the dry weather and poor soil allows only casuarina tree to grow. Heavy rainfall regions show prominence of tropical evergreen forests. Javadi hills are noted for their fruit bearing trees and sandal wood.

Distribution of Forests

The distribution of forests among different districts of the state is very uneven. Concentration of forests is mostly on the hills of the western districts and in the Javadi group of hills in Vellore district. Dense forests are also seen in Salem district. More than half of the area in the Nilgiris is under forests. Other districts hold 1 to 5 % of area under forests. Thanjavur being the alluvial plain is suitable for agriculture which has less than 1 % of forest cover.

The forests of Tamil Nadu have different types of trees. Most of the trees in the state shed their leaves in the dry season. Tamil Nadu has large areas of sandal wood plantations, about 5,88,000 hactares. Hard wood trees are available in the forests of Coimbatore, Niligiris and Kanyakumari.

Trees that are used as fuel are found in Madurai, Coimbatore and

Thirunelveli districts. Kanyakumari district has rubber plantations. In the Nilgiris, camphor and eucalyptus trees are grown under afforestation. In the foothills of the Western Ghats and parts of Thirunelveli and Virudhunagar districts, there are trees that are used for making matchsticks. The trees such as peepal, blue apples, jack fruit and gooseberries grow all over the state.

Types of Forests

The Natural Vegetation can be broadly divided into five different types. They are:

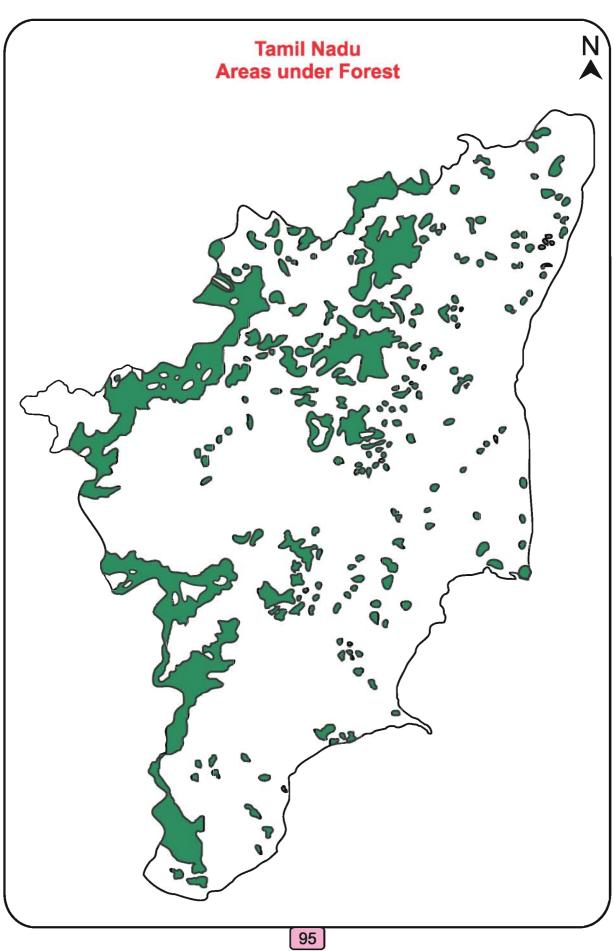
- Tropical evergreen forests;
- Tropical deciduous forests;
- Thorny shrub forests;
- Mangrove forests and
- Hill forests.

Tropical evergreen forests

As the name implies these forests are evergreen and they never shed their leaves in a particular season. Since the leaves are present always, they are called as the evergreen forests. Tropical evergreen forests are distributed in the regions of heavy rainfall(above 200 cm annual rainfall). These forests are found along the slopes of the Nilgris and Anamalai hills and the coastal areas of Tamil Nadu. The hard wood trees like ebony, teak, rosewood and ironwood are also found here. They grow to a height of 60 m.

Tropical deciduous forests

These forests are found in the areas having rainfall ranging between 100 and 200 cm per year. They are found on the eastern slopes of the Western Ghats. These are also called as monsoon forests. The trees of these forests shed their leaves to avoid the loss of moisture during dry season.



Trees of different varieties such as, tall and short, soft and hard woods are found in these forests. Some of them are sal, sandal wood, teak, bamboo and paddock.

Thorny shrub forests

Thorny shrub forests are found in the areas where there are long dry periods and low rainfall. This type of vegetation includes low, widely scattered low trees and bushes. They are highly adaptive to dry conditions, with deep roots, thick stems and fleshy leaves.

Mangrove forests

Mangroves are found in the tropical and sub-tropical tidal areas, which have a high degree of salinity. Mangrove trees grow along the estuaries and back waters. In Tamil Nadu, Pitchavaram, Kodikkarai and vedaranyam, have mangrove or tidal forests. Pitchavaram has the largest swamp forest cover in the state. It is near the city of Chidambaram in Cuddalore district submerged under the back waters of the bay of Bengal. Here, thicky wooded islands of mangroves are found covering an area of about 1,214 hactares. These forests also contain tropical evergreen trees and shrubs, belonging to the genus Rhyzophora. In Pitchavaram



Mangrove forest in Pitchavaram

mangrove forests are found in 25 km² and Kodikkarai the forests cover about 17 km².

Hill forests

These forests are found along the hill slopes where the rainfall is heavy. In the hills of Anamalai and Niligris, different varieties of flora such as trees, shrubs, climbers and creepers are found, according to altitude.

Forest Product

The forest products of Tamil Nadu may be divided into two: major and minor products. Major products include timber and fuel wood. Timber is used for many purposes namely:

- Building construction;
- Making for furniture;
- Boat building;
- Plywood;
- Hard wood;
- Matches:
- Pulp:
- Paper industries;
- Packing boxes;
- Wooden toys;
- Pencils: and
- Wood carving.

The minor products are bamboo, canes, leaves, grasses, essential oils, medicinal plants, resins, gums, tanning materials, spices, dyes, beewax, honey, turpentine and lac. A large number of these products are used as raw materials for cottage industries while some serve as valuable articles of export.

EXERCISE I) Choose the correct answer. 1.Tamil Nadu has climate. a) Tropical b) Temperature c) Polar d)Arctic 2. Tropical cyclones occur during the month of . . . a) November b) January c) December d)April 3. Teak and ebony belong to a) Tropical evergreen forest b) Tropical deciduous forest c) Mangrove forest d) Hill forest 4. Tamil Nadu receives _____rainfall during South west monsoon season. a) Very high b) Low c) Moderate d) High 5. Northeast monsoon winds blow during months. a) June to September b) October to November c) December to February d) March to May 6. Mangrove forests are found in a) Vedaranyam b) Coimbatore c) Pudukottai d) Nilgiris 7. The trees of forest shed their leaves during dry season. a) Tidal b) Deciduous c) Evergreen d) Mangrove II) Match the following. 1 Evergreen forest Forest product 2. Monsoon forest March to June 3. Hot season December to February 4. Cold season Rosewood 5. Timber Shed the leaves Sundari Trees Bamboo III) Answer in brief. 1. List down the Geographical factors that influence the climate of Tamil Nadu. 2. Name the seasons of Tamil Nadu. 3. Define monsoon? 4. Distinguish between South West and North East monsoon. 5. Distinguish between Evergreen and Monsoon forest. 6. East coast of Tamil Nadu does not receive much rainfall during South West monsoon-Give reason. 7. Give a short note on cyclonic rainfall. 8. Name few forest products of Tamil Nadu.

IV) Answer in a paragraph.

- 1. Describe the different kinds of natural vegetation of Tamil Nadu.
- 2. Account the Rainy seasons of Tamil Nadu.
- 3. Write about the rainfall regions of Tamil Nadu.

V) Mark the following on a given map of Tamil Nadu.

- 1. Direction of Arabian sea branch of monsoons.
- 2. Direction of Retreating monsoons.
- 3. Areas of Evergreen forests.
- 4. District that receives of low rainfall.
- 5. District that receives of heavy rainfall.

4. RESOURCES OF TAMIL NADU

Resources

The term 'resources' refers to the natural wealth available on the earth surface for the welfare of mankind. The surrounding environment contains many natural elements like rocks and minerals on and under the surface of the earth. Water is available in the form of lakes, rivers and seas. Living organisms like plants and animals are also present. These resources can be utilized for the betterment of a country's economy. Resources may be assessed on the basis of factors such as:

- 1. Types of resources; and
- 2. Characteristics of resources.

Let us do

List five resources you use in your home and five you use in your classroom.

Resources have three main characteristics: utility, quantity (often in terms of availability), and consumption

Natural resources

Natural resources are essential for our survival, to satisfy human wants and needs. It may be classified in different ways.

On the basis of origin, resources may be divided into two: Biotic and Abiotic.

Biotic Resources

Biotic resources are those obtained from the biosphere. Forests and their products, animals, birds and their products, fish and other marine organisms are examples of the biotic resources. Minerals such as coal and petroleum are also included in this

category because they are formed from the decayed organic matter.

Abiotic Resources

Abiotic resources comprise of nonliving things. Examples are land, water, air and minerals such as gold, iron, copper and silver.

On the basis of availability, resources are classified into two groups as Renewable and Non-renewable resources.

Renewable resources

Renewable resources are those which can be replenished or reproduced without getting depleted or exhausted. Examples of these resources are light, heat and energy from the sun; wind energy; water from lakes, rivers and seas and the soils from the earth's crust.

Non-renewable resources

Non-renewable resources are those which are formed over very long geological periods and are certain to be exhausted in course of time. Example: Coal, oil and other minerals.

Resources are finally divided on the basis of their origin. These include:

- Land resources;
- Soil resources:
- Mineral resources; and
- Water resources.

Land Resources

Land is a basic resource as it satisfies the day-to-day requirements of human beings and animals that are obtained from the land. Human beings obtain their basic necessities of food by cultivating the land. Land is also used

for a variety of purposes. It is mainly used for construction activities of houses, industries, roads and railway lines. Apart from this land is also under forests and grasslands. Forest provide valuable timber while grasslands provide fodder for animals. As far as the land resources of Tamil Nadu is concerned, its land resources are classified into 9 land use types and are presented in the diagram given below. Among the districts of Tamil Nadu, Erode holds the largest share(10 %) of forests, followed by Krishnagiri (9.6 %), Dharmapuri(7.7 %), Thiruvannamalai (7.2%) and Vellore (7.1%).

Barren lands are more in the districts of Villupuram, Theni and Salem. Ninety per cent of the land in Chennai is utilized for non-agricultural uses such as residential and industrial uses. Non-agricultural land use is also predominantly found in the districts of Thiruvallur, Kancheepuram, Villupuram and Pudukottai. Area under current fallow is more in Coimbatore and Erode districts whereas Thirunelveli district has more area under other fallow lands.

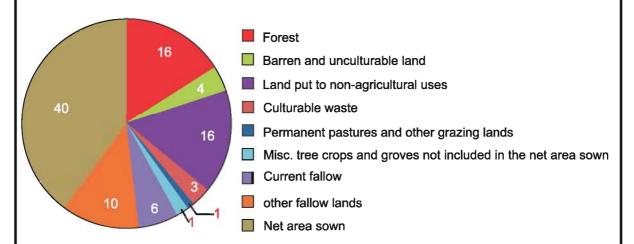


Table :Land use categories for Tamil Nadu

S.No	Category	Area	%
1	Forest	21,10,703	16.2
2	Barren and unculturable land	5,03,255	3.9
3	Land put to non-agricultural uses	21,38,679	16.4
4	Culturable waste	3,68,661	2.8
5	Permanent pastures and other grazing lands	1,10,309	0.8
6	Misc. tree crops and groves not included in the net area sown	2,74,351	2.1
7	Current fallow	7,58,840	5.8
8	Other fallow lands	15,18,008	11.7
9	Net area sown	52,43,839	40.3
	Geographical area	1,30,26,645	100.0

Let us do

Talk to an elderly person in your family or neighborhood and collect information about changes in the land use over the years, in the place where you live.

Soil Resources

Soil is the loose material which forms the upper most layer of the earth, consisting mainly of very small particles. It is an essential element for the development of agriculture, as It provides essential minerals or nutrients for the growth of vegetation. Soil forming processes are controlled by the factors such as parent rock, climate, relief, time factor, flora, fauna and micro organisms present in the soil (Fig: a and b).

Figure a: Process of soil formation **Parent Rock** Climate Determines colour, texture, Temperature.Rainfall chemical properties of minerals, influence rate of content, permeabilty weathering and humus Formation of Soil Time Relief Determines thickness Altitude and slope, determine accumulation of soil profile of soil Flora, Fauna and Micro-Organism Affect the rate of humus formation Figure b: Soil profile

Top soil with humus and vegetation

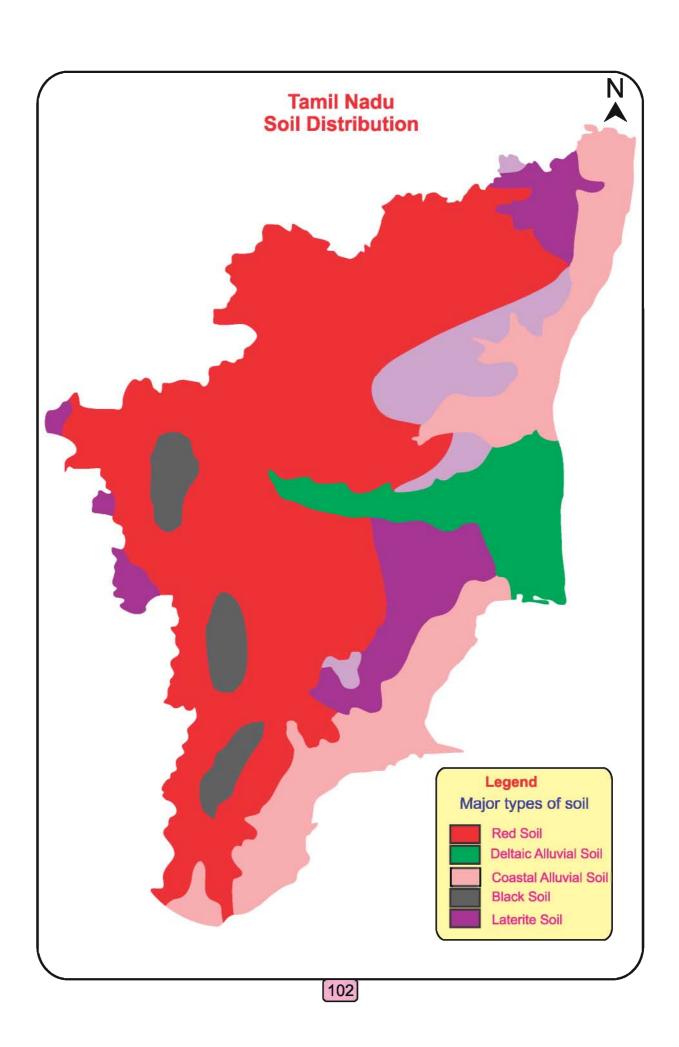
Sub soil with sand, silt and clay

Do you know?

It takes hundreds of years to make just one centimetre of Soil.

Parent rock

Weathered rock



Soils of Tamil Nadu

The soils of Tamil Nadu may be grouped into five types. They are classified according to their formation, size and colour. Their occurrence in the districts of Tamil Nadu is given below

Table: Types of soils in Tamil Nadu and their distribution

SI. No	SOIL	DISTRICT
1	Alluvial soils	Thanjavur, Thiruvarur and Nagapattinam, Villupuram, Cuddalore, Thirunelveli and Kanyakumari.
2	Regur or the black soils	Coimbatore, Madurai, Virudhunagar, Thuthukudi and Tirunelveli.
3	Red Loams	Sivagangai, Ramanathapuram.
4	Laterite soils	Kancheepuram, Thiruvallur, Thanjavur, hill tops of western ghats and eastern ghats.
5	Saline soils	Predominantly in Vedaranyam, Coromandal coast and for about 10 km in all the coastal districts of Tamil Nadu.

Activity

In Tamil Nadu soils could be either alluvial, black, red, laterite or saline. Collect a handful of different types of soil and observe. How are they different? Write down.

Forest Resources

Tamil Nadu's wealth of flora and fauna lies in the hilly and forest regions. Some of its major wildlife sanctuaries like Mudumalai and Anaimalai (Indira Gandhi Wild life sanctuary) are situated on the hills of the Western Ghats, which have habitats for elephants, tigers, bisons and a variety of monkeys and deer. Among the 3,000 and more plant species found in Tamil Nadu, majority of them are found in the mixed deciduous forests. One of the most noteworthy flowers is the Kurinji of Kodaikanal hills which blooms once in 12 years. The state has recognised it with special status. Cinchona, a forest product, from which quinine-a drug for treating malaria is extracted. Eucalyptus which grows abundantly in the Nilgiris is also used as medicine for curing cold and as pain reliever.

Medicinal herbs are commonly found on the Palani hills and Courtallam. Palmyrah trees are grown abundantly in Thirunelveli district, as subsidiary activity to agriculture. products are used as raw materials for several cottage industries. Exotic varieties of sandalwood are grown in Javadhi hills of Vellore district. The forest areas of Tiruvannamalai and Tirunelveli districts of the state are being regenerated and protected by the State Forest Department. These forests not only provide for the large economy of the state but also to the local livelihood.

Do you know?

'Vanamahotsava' is celebrated in October every year to highlight the importance of wild life.

World Wildlife Day October 4
World Forest Day March 21
World Water Day March 22

Water Resources

Water resources comprising of surface water (river and lakes), ground water, marine and coastal waters, support all living things including human beings. Basically, man requires safe protected water supply for drinking, cooking, washing and bathing. In the agricultural sector, the growth of plants and yield of crops are directly related to the quality and quantity of water available. Underground water is also used for the purpose of irrigation and other utilities. All industries require water either for processing or for other utilities.

Table: Water resources in Tamil Nadu

Water Sources	Numbers
Rivers	17
Lakes	15
Tanks	40319
Ponds	21205
Canals	2395
Reservoirs	71
Wells	1908695

Do you know?

Rainwater harvesting is the process of collecting rainwater from roof tops and directing it to an appropriate location where it is stored for ground-water recharge. On an average, one spell of rain for two hours is enough to recharge 8,000 litres of water.

Animal Resources

Apart from foodgrains meat, poultry and dairy products are also considered as dietary components. Animals which are domesticated yield wool, fur and skin that form the basic raw materials for specific clothing, shoes and other products. The animal resources contribute a lot to the development of the economy where they are reared commercially.

Table: Livestock in Tamil Nadu

Livestock	No of animals
Cattle	91,41,043
Buffaloes	16,50,343
Sheep	55,93,485
Goat	81,77,420

Glossary National Park

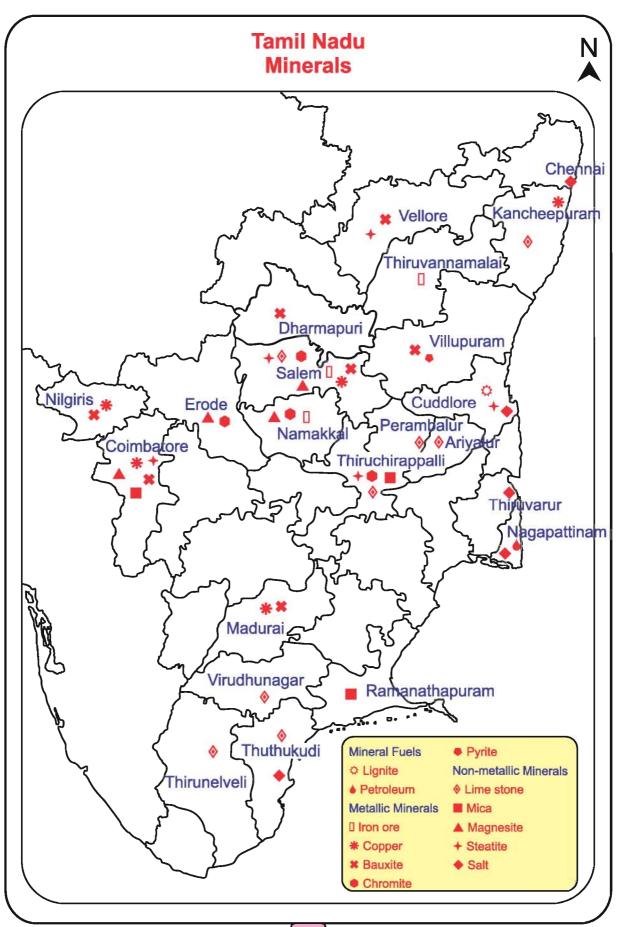
A natural area designated to protect the ecological balance of one or more ecosystems for the present and the future generations is referred to as a National Park.

Mineral Resources

A mineral is a substance or compound of organic or inorganic origin found on the earth's crust. Every mineral has a definite composition and distinct physical characteristics. Most of the minerals are crystalline in nature and occur widely in rocks. Rocks contain one or more minerals. Natural forms of minerals are called ores and minerals are processed from ores.

Do you know?

The salt used in cooking and graphite in your lead pencil is a mineral.



The major mineral resources of Tamil Nadu include Lignite, Vermiculite, Garnet, Zircon, Graphite, Ilmenite, Rutile, Monazite and Magnesite.

Classification of Minerals

Minerals are classified into three

categories. They are

- 1. Metallic Minerals;
- 2. Non-Metallic Minerals; and
- 3. Mineral Fuels.

Table: Metallic Minerals of Tamil Nadu

MINERALS	DISTRICT		
Iron ore	Salem, Namakkal and Thiruvannamalai		
Copper	Salem, Nilgiris, Coimbatore, Madurai and Mamandur		
Bauxite	Salem, Nilgiris, Coimbatore, Vellore, Dhamapuri, Madurai and Vilupuram		
Chromite	Salem, Namakkal, Thiruchirappalli and Erode		
Pyrite	Villupuram		

Table: Non-Metallic Minerals of Tamil Nadu

MINERALS	DISTRICT	
Lime stone Virudhunagar , Thuthukudi, Thirunelvelli, Thiruchirappa Kanchipuram and Salem		
Mica	Thiruchirappalli, Coimbatore and Ramanathapuram	
Magnesite	Salem, Namakkal, Coimbatore and Erode	
Steatite	Vellore, Cuddalore, Coimabtore, Salem and Thiruchirapalli	
Salt	Chennai, Thuthukudi, Cuddalore, Nagapattinam and Thiruvarur	

Table: Mineral Fuels of Tamil Nadu

MINERALS	DISTRICT	
Petroleum	Thiruvarur (Panamgudi), Narimanam (Kaveri Delta Region)	
Lignite	Neyveli	

Activity

With the help of an atlas, mark the distribution of iron, copper, bauxite, gold and lignite on an outline map of Tamil Nadu.

Energy Resources

Resources from which energy can be obtained for heating and lighting are called energy resources.

The energy resources can be divided into two types. They are:

- 1. Conventional Power Resources; and
- 2. Non-conventional Power Resources.

Conventional Power Resources

Conventional source of energy are those which have been traditionally used by mankind for a long time. It usually includes fossil fuels like coal, natural gas, oil as well as nuclear power.

Types

The three major conventional energy sources are:

- 1. Thermal Power Resources;
- 2. Hydel Power Resources; and
- 3. Atomic Power Resources.

Thermal Power Resources

Power is generated from nonrenewable energy sources such as coal, oil, and Natural gas, is known as thermal power.



Thermal Power Station-Neyveli

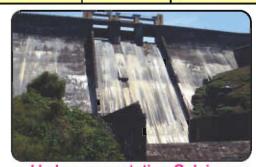
Thermal power is produced by heating the water. The steam thus formed spins the turbine to produce electricity.

Table: Thermal power plants of Tamil Nadu

Name of the Plant	District	Types of Fuel	Capacity in MW
Neyveli Lignite Corporation	Cuddlore	Coal	2490
North Chennai Thermal Power Unit-I	Thiruvallur	Coal	1200
Thuthukudi Thermal Power Plant	Thuthukudi	Coal	1000
Mettur Thermal Power Station	Salem	Coal	600

Hydropower Energy

Hydro power has been with humanity for a long time. Energy in a rushing river, is captured through a wheel as mechanical energy. Originally, these water wheels powered grain mills, spinning a grindstone directly. On the whole Tamil Nadu



Hydropower station-Solaiyar

Table: Hydropower plants of Tamil Nadu

S.No.	HYDRO POWER PLANT	RIVERS	MW
1	Kundah I to V	Bhavani	500
2	Mettur Tunnel	Kaveri	840
3	Aliyar	Aliyar	60
4	Kodayar I and II	Kodayar	100
5	Sholaiyar I and II	Sholayar	95
6	Kadamparai	Kadamparai	400
7	Lower Mettur	Kaveri	120
8	Papanasam Hydro Electric Power	Papanasam	32
9	Pykara	Pykara	150
Total			2297

produces about 2,297 Mega Watts of hydro electric power by 2010 year.

Atomic Power Station

Atomic energy is the energy produced from the fusion of atoms. It results from a nuclear reaction, a process in which two nuclei or nuclear particles collide, to produce electrical energy by nuclear reactors.



Atomic Power Station- Kalpakkam

The first Atomic Power Station of Tamil Nadu is located at Kalpakkam about 80 km south of Chennai. It has a comprehensive nuclear power production, fuel reprocessing, and waste treatment facility that includes plutonium fuel fabrication for fast breeder reactors (FBRs). It is also India's first fully indigenously constructed nuclear power station. It

has two units which produce about 500MW of energy.

Another Nuclear Power station is currently under construction in Kudankulam of Thirunelveli district. This station has four reactors which are expected to produce about 1,000 MW from each reactor.

Non-conventional Power Resources

Non-conventional Power Resources are known as renewable resources. Sun is the biggest source of non-conventional energy. Energy is in the form of photons. India receives abundant sunlight for about 250-300 days in a year. Conversion of solar energy to electric energy and thermal energy takes place mainly by photovoltaic cells and through solar thermal pathways. The non-conventional energy resources are:

Solar Energy;

Wind Energy;

Tidal wave Energy:

Geo-thermal Energy;

Bio-fuel Energy; and

Energy from baggasse.

Excluding tidal wave energy and geothermal energy, all other types have been harnessed in Tamil Nadu and their rate of utilization is discussed below.

Solar Energy

Solar power is generated from sunlight. This can be used as direct power with photovoltaic (PV) cells, or indirect with concentrating solar power (CSP), Sun's energy is focused to boil water which is then used to generate power.



Generation of Solar Power

Dindugul, Krishnagiri, Dharmapuri are the districts which extract energy from solar power units.

Wind Energy

Wind power is the conversion of wind energy into a useful form of energy. It is generated using wind turbines to make electricity for wind mills and wind pumps for pumping water or drainage and used to propel ships.



Wind Farm-Aralyaimozhi

Advantages and Disadvantages of Wind Energy

Advantages	Disadvantages
Non-polluting source	Noise pollution
Low cost of production	Wind mills are very costly to setup
Safe and clean	Disturbs radio and T.V. reception.
Inexhaustible	Diffused source, so gets wasted

The total amount of wind energy produced is about 5,208 MW per year. The following table gives the regions of wind energy production and their generating capacity.

Table: Location and capacity of Wind Farms in Tamil Nadu

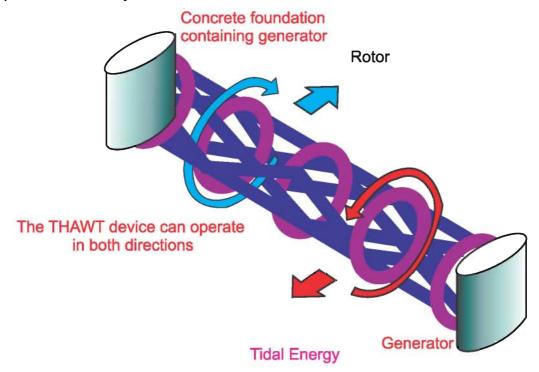
2750		A STATE OF THE STA
SI. No	LOCATION	CAPACITY MW
(I)	Aralvaimozhi Pass (Muppandal area) Kanyakumari/ Thirunelveli Districts.	1,658
(ii)	Sengottah Pass (Kayathar area) Thirunelveli, Thuthukudi Districts.	1,105
(iii)	Palghat Pass (Kethanur area) Coimbatore.	1,995
(iv)	Coastal area near Chennai and Rameswaram in Ramanathapuram District and other areas (Theni, Palani areas).	450
	Total	5,208

Tidal Wave Energy

Energy generated from tides is called tidal energy. Tidal energy can be harnessed by building dams at narrow openings of the sea. During high tide the energy of the tides is used to turn the turbines installed in the dam to produce electricity.

Advantages and Disadvantages of Wind Energy

Advantages	Disadvantages
Non- polluting	Destroys wildlife habitats
Inexhaustible	Difficult to harness.



Do you know?

The first tidal energy station was built in France.

Advantages of Tidal Energy	Disadvantages of Tidal Energy
Clean, eco- friendly and always available.	Located far away from cities and so costly to transport electricity.
Cheap compared to other energy sources.	Can be generated only during windy days.

Geo-thermal Energy

Geo-thermal power utilizes the heat in the interior of the earth for generation of power. In areas where volcanoes exist, the rocks in contact with molten magma are quite hot. When rain water seeps into these rocks, it gets converted into steam and gushes out as a geyser. Hot springs may also occur in such areas. The steam generated can be used to generate power on a small scale.

Bio-fuel Energy

Bio-fuels are a wide range of fuels. The term covers solid biomass, liquid fuels and various biogases. Currently, 13 plants with a capacity of 130 MW are operating in Tamil Nadu.

Table: Bio-fuel Plants in Tamil Nadu

S.No.	District	NO. OF PLANTS
1	Sivakasi	2
2	Pudukottai	2
3	Tiruvanamallai	1
4	Dindigual	1
5	Theni	1
6	Thanjavur	1
7	Madurai	1
8	Virudunagar	1
9	Thiruvallur	1
10	Kanchipuram	1
11	Krishnagiri	1)



Bio-fuel Energy

Energy From Sugarcane Bagasse

Residual cane fibre (bagasse) is burned as fuel. In Tamil Nadu there are about 18 sugar mills producing energy of nearly 411 MW from bagasse. Table given below lists the sugar mill locations with their energy producing capacity



TAMIL NADU ENERGY DEVELOPMENT
Table: List of Sugar Mills with Co-generation Plants in Tamil Nadu

S.No.	SUGAR MILLS	DISTRICT	CAPACITY
1	MRK Co-operative Sugar Mills Ltd	Cuddalore	7.50
2	Cheyyar Co-operative Sugar Mills	Thiruvannamalai	7.50
3	Dharani Sugars & Chemicals Ltd	Thirunelveli	15.00
4	Rajashree Sugars & Chemicals Ltd	Theni	12.00
5	Kothari Sugars & Chemicals Ltd	Theni	12.00
6	Terry Energy Ltd	Cuddalore	28.42
7	S.V. Sugar Mills Ltd	Kancheepuram	45.00
8	Subramania Siva Co-operative Mills Ltd	Dharmapuri	5.00
9	Terry Energy Ltd	Thanjavur	18.68
10	EID Parry India Ltd	Cuddalore	30.00
11	Sakthi Sugar Mills	Sivaganga	5.500
12	Arunachalam Sugar Mills Ltd	Thiruvannamalai	19.00
13	Bannari Amman Sugars Ltd	Erode	20.00

			1
14	Auro Energy Ltd	Nagaipattinam	16.00
15	Sri Ambika Sugar Mills	Cuddalore	40.00
16	Sakthi Sugar Mills Pvt.	Erode	32.00
17	Rajashree Sugars Chemicals Ltd.	Villupuram	22.00
18	EID Parry India Ltd.	Pudukottai	18.00
19	Kothari sugars and Chemicals	Ariyalur	22.00

Activity
Find the process of energy production in a Co-generation plant located in your area by visiting it.

EXERCISE

I) Choose	the correc	t answer.
-----------	------------	-----------

	1. Which one of the following is not a factor of soil formation.					
	a) Time	b) Soil texture	c) Organic matter	d) Inorganic matter		
	2. Biotic resources are those obtained from the					
	a) Time	b) Biosphere	c) Water	d) Wind		
	3determines thickness of soil profile					
	a) Climate	b)Time	c) Relief	d) Wind		
	4. Medicinal herb	_ hills				
	a) Palani hills	b)Agasthya hills	c)Anaimudi	d) Chennimalai		
	5. Which one of the following is a leading producer of Lignite					
	a) Villupuram	b) Neyveli	c) Chennai	d) Erode		
	6. Which one of the following is not a producer of Iron ore					
	a) Salem	b) Thiruchirapalli	c) Coimbatore	d) Chennai		
II) Match the following.						
	1. Mettur Therma	al power station	Dharmapuri			
	2. Wind energy		Medicine			
	3. Saline Soils		Villupuram			
	4. Cinchona		5,500 MW			
	5. Solar power		Vedaranyam			
			Chennai			
			Perambalur			

III) Answer in brief.

- 1. Define Resources.
- 2.Define soil.
- 3. Which are the factors that determines formation of soil?
- 4. Define rain water harvesting.
- 5. What is National park?
- 6. Name the Hydel power plants of Tamil Nadu.
- 7. Distinguish between Conventional and Non-Conventional sources of energy
- 8. What are the advantages and Disadvantages of wind energy?
- 9. Soil is non-renewable resources Explain.

IV) Answer in a paragraph.

- 1. Explain the different types of soil found in Tamil Nadu.
- 2. What are the uses of forest?
- 3. Give an account of the mineral resources in Tamilnadu.
- 4. Give an account of Thermal power Resources in Tamilnadu.

V) Mark the following on a given map of Tamil Nadu.

Mark the areas mining:

- 1.Iron
- 2.Copper
- 3.Bauxite
- 4.Lignite