

## CHAPTER - 19

# MODERN EUROPE



**We learn about the following in this chapter,**

- Causes and effects of Renaissance.
- Geographical explorations and their effects.
- Reasons for Religious Reformation and effects.
- Industrial Revolution and its effects.

After the fall of Roman Empire, the political and social systems of many of the European countries plunged into chaos. The situation worsened after the death of Roman Emperor, Charlemagne. Anarchy prevailed and there was no protection for life and property. At such a critical period, a new political and economic system took birth in Western Europe. This was feudalism. It was a system based on mutual agreement between the powerful land owners and the weak farmers.

Europe entered a new age during 15th & 16th centuries in the world History. The end of the Middle Ages and the beginning of the Modern Age have turned out to be two important events in the history of Europe. Capture of Constantinople by the Turks and increased trade activities were the causes the Renaissance, Geographical explorations, religious reformation movement and industrial revolution.

### The Renaissance

The word Renaissance means rebirth or reawakening. This word sums up all the intellectual transformation towards the end of the middle ages in Europe. The 14<sup>th</sup> and 15<sup>th</sup> centuries indicate the development of Western European art, architecture, religion, philosophy, science and political matters. The intellectual renaissance started first in Italy. Later on, it spread to other areas. Therefore, Italy can be called the birthplace of Renaissance.

### Reasons for Renaissance

The fall of Constantinople in the year 1453, end of slavery, development of Guttenberg's printing machine in Germany and geographical explorations were the important reasons for Renaissance. The patronage given to scholars, artists, scientists and philosophers by the princes of Europe, aristocrats, merchants and clergy also contributed to the Renaissance.

## **Features of Renaissance**

1. The vision of the people during the Renaissance movement was quite different from that of the people in the Middle Ages. People's opinions towards the world and man changed. This was called 'humanism'. The humanists developed keen interest in great literature. Attempts were made to support actions related to human life.
2. The works written in English, Italian and German languages by the writers of Renaissance period became very popular.
3. There were changes in the economic and social life. Agriculture gave place to commercial and industrial activities. Fundamental changes took place in social relations also.
4. The main feature of Renaissance was the interest shown by people in great culture and their desire to cultivate it. This is called "Imitation of the best".
5. The migration of Greek and Roman Scholars to Italy, led to the Renaissance there.

## **Literature during Renaissance Period**



**Petrarch**

Italy was the motherland of great writers. France, England, Germany and Spain too contributed a lot to literature. The theme of literature of this period was worldly matters rather than religion. Many articles were written about the human body, voice and other subjects. Instead of Latin, many of the regional European languages came to be used in daily life.

### **Petrarch : (1304-1374)**

Petrarch is known as the 'Father of Renaissance'. He collected about 200 Latin and Greek manuscripts. 'Africa' is his famous poem. He was well-known for his poems and sonnets. A deep contemplation of man's happiness and sorrow can be seen in his poems.

A collection of 100 stories called 'Decameron' written in Italian by Boccaccio, the famous work 'Divine Comedy' by Dante, 'Canterbury Tales' by Chaucer of England, Don Quixote by Cervantes of Spain, Utopia written by Thomas More of England are all notable works. William Shakespeare was an excellent poet and dramatist. He wrote numerous tragedies and comedies. St. Paul School, established in London, was dedicated to the acquisition of this new knowledge.

## Renaissance Art (architecture and sculpture)

During this period, the art was simple but natural. Artists drew murals showing mythological characters, Jesus Christ and his followers with natural human emotions.



**Renaissance Painting**

There were many artists in Italy during the 16<sup>th</sup> century. Michael Angelo, Raphael, Leonardo da Vinci and Titian were important artists. Michael Angelo's 'Adam and Final Decision', Leonardo da Vinci's 'Last Supper' and 'Monalisa', Raphael's 'Sistine Madonna' and Titian's 'Assumption of the Virgin' were the famous paintings.

## Science during Renaissance (birth of Modern science)

Modern science was born during the Renaissance period. Science set aside religious dogma and came out with new discoveries. Learning about humans became a precursor to new inventions. People during the Middle Ages accepted everything without any questions. As necessity and questioning attitude developed, scientific research also increased. Francis Bacon declared that ancient scientific decisions did not represent any professional knowledge. Decarthe encouraged skepticism and advocated questioning of everything before accepting it. Poland's Copernicus disproved the earth-centric argument of Ptolemy of Greece and showed that the sun was the centre of the solar system.

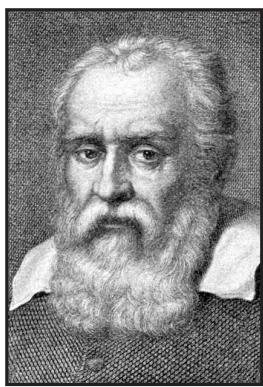
### Keppler



**Keppler**

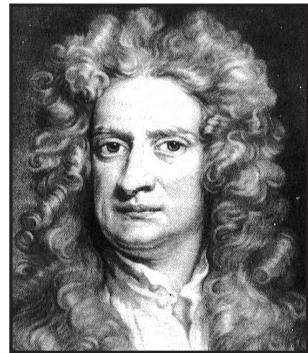
Keppler was a German scientist and explained that planets revolve around the sun on an oval orbit.

**Galileo** : Galileo discovered the telescope. When he supported the theory of Copernicus, he was summoned to Rome and admonished by it.



**Galileo**

**Newton** : Newton discovered the laws of Gravitation and said that all heavenly bodies are controlled by this gravitational force. Keen interest was shown in the study of chemistry, medical science and anatomy. Andew Vesolius conducted a human surgery and wrote a scientific book on the possibility of effective treatment on the skeletal system, muscular system, brain, liver and reproductive organs.



**Newton**

### **Effects of Renaissance**

During the Renaissance period, a humanitarian approach to life gained popularity. Scientific knowledge grew about the world. Knowledge of movement of astronomical bodies expanded and geographical exploration was possible by using sea routes. As a result of scientific discoveries and technological advances, industrial revolution became a reality. Dogmas were condemned. Progressive thinking gained momentum. This led to changes in the Catholic church and paved way for religious reformation movement.

### **Geographical explorations**

The 16<sup>th</sup> century has been called a century of geographical explorations. Till the end of the Middle Ages, Europeans were not much aware of geography. In the later developments, Europeans found new sea routes to various parts of the world. The new continents of North America, South America and Australia came to light.

### **Reasons for geographical explorations**

1. When the Turks conquered the city of Constantinople in 1453, it opened the trade gates between east and west. The greater share of the profits from importing spices from India went to the Turks. Due to this, the Europeans faced the inevitability of finding a new sea route to India.
2. Spain and Portugal were ambitious in competing with Arabs in sea trade.
3. Discovery of new countries opened the possibility of spreading Christianity.
4. European curiosity was roused by the adventurous nature of sea voyage towards eastern countries.



**Mariner's compass**

Instrument used to show distance and route to navigators



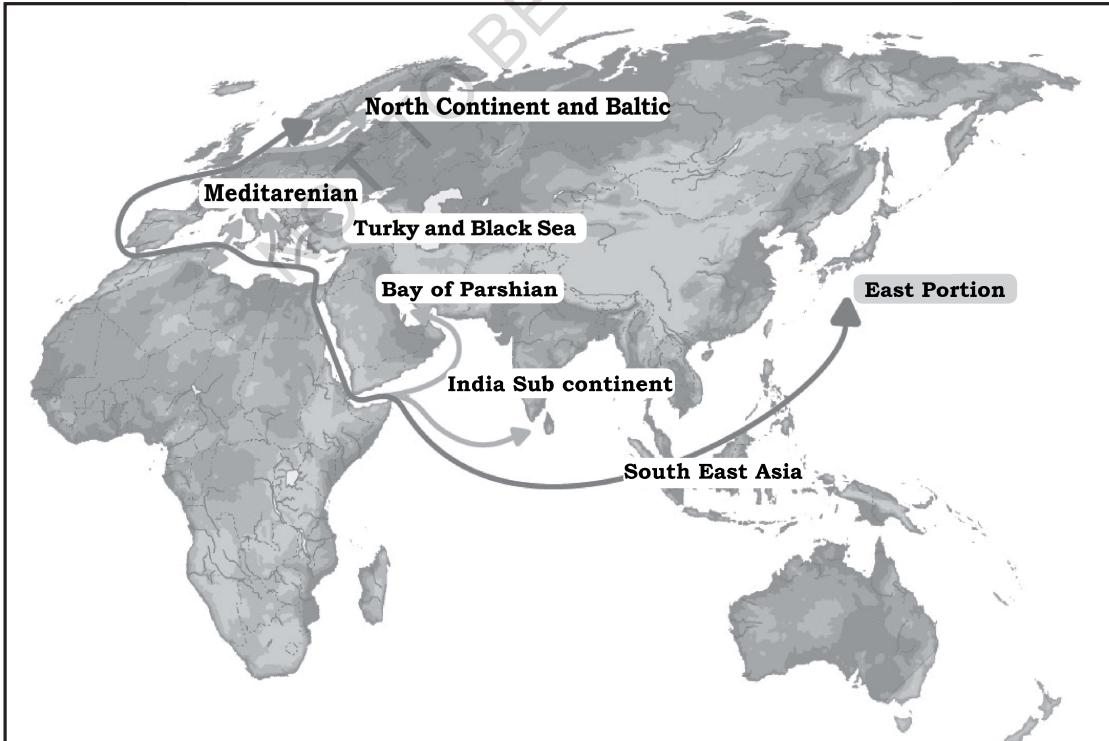
**Astrolobe**

Instrument used to show time and distance of sun, planet and stars from earth

5. Mariner's compass and astrolabe equipment were helpful to sailors. Charts and maps were available to sailors.
6. Europeans believed that China was a fertile place to make profit.

### **Geographical explorations**

The countries which engaged in geographical explorations after the Middle Ages were Portugal and Spain. The sailors sent by Henry moved around for a long period, explored the west coast of the African continent and went a long distance towards the south. Bartholomew Dias reached the southern tip of African continent and called it Cape



**Map of the world (New Sea route)**

of Good Hope. In 1498 Vasco-da-Gama of Portugal sailed around the Cape of Good Hope, crossed the Indian Ocean and reached Calicut in India. Thus, the dream of reaching India by Europeans came to be a reality.

#### **Do you know this?**

*Amerigo Vespucci discovered the mouth of Amazon river and called it the New Continent. This came to be known as America.*

Christopher Columbus of Genoa city, crossed the Atlantic ocean with the help of the king of Spain, reached the Bahamas in West Indies (Caribbean islands).

While Portugal's Cabral reached Brazil in 1500, Balboa climbed a hill near Panama Strait and saw the vast ocean to the west. That was the Pacific ocean. Another Portuguese sailor Ferdinand Magellan, was the first to go round the Cape. After travelling for 5 months, he reached South America in the year 1520. From there, he reached the Philippines through the Indian ocean. One ship passed between the Indonesian islands, went round the earth and reached Spain via Cape of Good Hope.

#### **Effects of land exploration**

1. Competition began between the countries of Europe to build colonies in the newly explored lands. The contest was severe for gaining strength in trade in America, Africa and Asia. This helped them gain monopoly in trading in the countries they conquered.
2. Raw materials from the new colonies enriched the European countries.
3. Capitalism gained strength in European countries and led to the beginning of the Industrial revolution.
4. Christian missionaries travelled far and wide and propagated Christianity.
5. Colonialism and imperialism led to hatred between the local and the foreigners.

#### **Religious Reformation**

The biggest religious movement of the 16<sup>th</sup> century in Europe was the revolt against the monopoly of the Roman Catholic church which led to religious reformation. The church was probably the most powerful institution in the Middle ages.

The religious reformation heralded the beginning of a new age. The movement started by Martin Luther is known as Religious reformation. This movement led to the Protestant sect in the Christian religion. There were many reasons for this movement:

1. Many members of the Christian clergy and the Popes instead of leading a chaste life, indulged in materialistic pleasures. Many of them committed immoral acts. The Popes, instead of reforming the religion, showed interest in politics. Italy's Boccaccio, Holland's Erasmus and England's John Wycliffe condemned these acts.
2. Not all the members of the clergy were scholars. They were unable to win over those who questioned the faith and methods of the church.
3. Clashes during the Middle Ages between the Emperor and the Pope, wounded the pride and self respect of the Emperor.
4. Nationalism grew in strength. They did not like the intervention of Roman Catholic church or the Pope.
5. Scientific approach and curiosity inspired by Renaissance made Europeans to contemplate application of these approaches to religious problems also.
6. The church opposed the translation of the Bible which was originally in Hebrew to other languages.



**Martin Luther**

### **Martin Luther: (1483 – 1546)**

The religious movement started by Martin Luther came to be known as “Religious Reformation”. Martin Luther rejected the preachings of the Catholic church. In the year 1517, he expressed opposition against the Church for selling of the confession letters. The Catholic church was of the view that God has bestowed the Pope with the authority of reducing the punishment of the sinners; this authority has been given to the Pope in return for the good deeds done by Jesus Christ and the missionaries. Normally, to be pardoned, a sinner had to do noble deeds. But on many occasions, instead of doing anything good, the sinners found the easy way of paying money to the church and getting the pardon. Martin Luther vehemently opposed the sale of such letters of pardon. The followers of Martin Luther were called ‘Protestants’. Around half of Germany’s population became Protestants.

Religious reformation took a new turn in Europe. The religious atmosphere became vitiated. All over Europe, people gave up their lives for their religious beliefs, or they were put in prison or divested of their property. Wherever they were more influential, Roman Catholics

harassed the Protestants. In retaliation, the Protestants harassed the Catholics in places where they had government support. The long war of thirty years was a result of the hatred between the Catholics and the Protestants.

### **Effects of the Religious Reformation**

1. As a result of the religious reformation, the solidarity of Christian religion received a severe blow. Christianity was divided into three sects: Catholic church, Orthodox church and Protestant church.
2. Many of the European kings got liberated from the hold of the Church and the Pope.
3. Religious reformation led to rise of nationalism.
4. The confiscated wealth of the Church was utilized for the economic development.
5. Patriotic feelings became strong and the kings of Europe developed religious tolerance.
6. Due to this movement, the literary field saw progress. Local languages influenced the European minds.
7. The Catholic church itself underwent reformation and this came to be known as “Counter Reformation”.

### **Counter Reformation Movement**

The Protestant group gained strength by spreading very rapidly. Alarmed by this development, the Catholics saw the necessity of self-reformation to protect their image. The arguments of Protestants were effective in attracting the attention of the people. This incident dealt a severe blow to the existence and survival of the Roman church. They had to do something to protect the interests of churches. Such a necessity gave birth to a movement called Counter-reformation. Stopping the advance of Protestants and repairing the damage to Roman churches were the objectives of this movement. Hence, an attempt was made to find a suitable solution to all the problems by making internal changes in the church.

The leader of this counter reformation was the Spanish aristocrat called Ignatius Loyola. He founded the Jesus society in the year 1540. Their main aim was to restore the glory and authority of Roman Catholic church. The main objective was to impart good education to the followers of this organization and make them to dedicate their lives for the service of society.

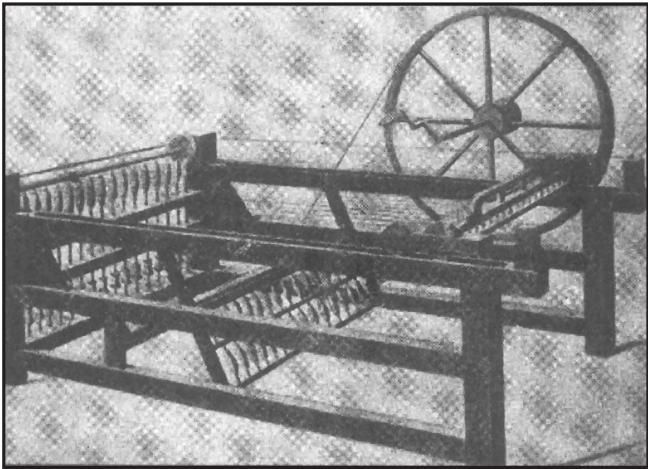
“Inquisition”, a religious practice of interrogating those who violated the dictates of the church and punishing them, came into existence from 1542 onwards. It also stopped the Catholics from getting converted into Protestants.

### **INDUSTRIAL REVOLUTION**

With the establishment of colonies, trade increased and demand for finished goods rose. The traditional processes of production could not meet the demand. It was at this time that there was intellectual awakening and the expectation of profit took root. Due to this, the people engaged in industries were encouraged to find better processes of production. In the early part of the 18<sup>th</sup> century, new methods in the fields of industry and transport brought about change. The changes that took place in the industrial field between 1760 to 1830 are called the Industrial Revolution.

The Industrial Revolution first began in England. Later it spread to other countries of the world. Normally ‘revolution’ means the fast-paced, violent, intense change in the political field. But the industrial revolution in England did not witness any swift or violent changes. The changes were slow but gradual and continuous. They were also wide-spread and profound.

Although England was primarily an agricultural country before 1760, woollen textile and cotton textile industries had developed well. As trade increased, the demand for finished goods too increased. But the production could not match the demand. The skilled artisans would not invest more on the raw materials and speed up the manufacture. Therefore, some rich people employed these skilled artisans for wages, provided them raw materials and made them work in big buildings called factories. This laid the foundation for establishment of factories. Although the factory owners reaped huge profits by selling the products manufactured in these factories, the skilled artisans and other laborers continued to be poor.



**Spinning Jenny Machine**

**Discuss :**

*Industrial revolution  
is supplement to Today's  
Economic development.  
Discuss.*

During the period from 1760 to 1830, great changes took place in the textile manufacturing industry in England. James Hargreaves invented a weaving machine called spinning jenny in 1764. After a few years, Richard Arkwright improved this spinning jenny, and in 1769, invented the waterframe.

In 1779, Samuel Crompton invented a machine known as 'mule'. John Kay invented the horse shoe which moved from one side to another. Edmund Cartwright invented the weaving machine called 'powerloom' in 1785. Due to this, more cloth could be produced in a very short time.

In 1793, Eli Whitney invented the cotton gin. All these inventions enabled spinning, weaving, ginning and producing textiles very fast.

The invention of the steam engine was another milestone in the industrial revolution. In 1705, Thomas Malcomus invented a kind of steam engine. James Watt improved this steam engine in 1774. In 1801, Richard Trevethick attached the Watt steam engine to a rail coach and made it move on the road. Later he invented an automatic steam engine which moved on rail tracks. In 1815 George Stevenson invented a rail coach that could be used to transport goods. A train to carry passengers between the British towns, Swakton and Darlington, and another train to transport goods from Liverpool and Manchester was constructed.

In 1801, an American, William Simington, adapted Watt's engine to a boat and made it move. Another American, Robert Fullton, invented a steam ship.

### **Effects of the industrial revolution**

Due to the innumerable changes in industries, demand for machines grew. Many changes took place in the economic and social fields too. New factories were established. The cost of production came down and essential products were available at a low price. Cottage industries could not compete with the giant factories and, thus, they collapsed. The rich became richer and the poor remained poor. People had to migrate from villages to towns. A capitalist class emerged in society. Hostilities developed between the owners and the workers, and class conflict began.

## **EXERCISES**

**I. Fill in the blanks with suitable words.**

1. Renaissance means \_\_\_\_\_.
2. \_\_\_\_\_ is called the father of Renaissance.
3. Followers of Martin Luther are \_\_\_\_\_.
4. The leader of the Counter Reformation movement was \_\_\_\_\_.
5. Founder of the spinning jenny machine was \_\_\_\_\_.

**II. Answer the following questions by discussing with your group.**

1. What were the consequences of religious reformation?
2. What were the reasons for geographical explorations?
3. Which are the water-colour paintings of Leonardo da Vinci?
4. Explain the development of literature in the period of Renaissance with an Example.
5. Describe the effects of Industrial Revolution.

**III. Activities :**

1. Know about the scientists of Renaissance period from your teacher.
2. Collect the picture of machines developed during Industrial revolution.

**IV. Projects :**

1. Collect pictures of artists of the Renaissance period and their works.
2. List out the names of scientists and their discoveries.
3. Discuss with your art teachers and collect the life histories of present-day artists.
4. Make a list of discoveries of the Indian scientists who lived before the time of European scientists.