

6 CHAPTER SECONDARY ACTIVITIES

Q.1 What are secondary activities?

Ans. Activities which add value to natural resources and transform them into valuable products is called secondary activities.

Q.2 What is manufacturing?

Ans. Manufacturing refers to mass production of all/any kinds of identical goods with the use of power, specialised labour and a factory. It transforms raw materials into finished goods of high value. It is done in either by hand or power driven machinery.

Industry refers to simple processing of natural raw materials. The production techniques are less complicated.

CHARACTERISTICS OF MODERN MANUFACTURING

Q.3 Describe the characteristics of modern large-scale manufacturing.

Ans. Modern manufacturing industries have following characteristics:

- i. **Specialisation of skills & methods of production:**
Modern manufacturing involves mass production of identical products in large quantities. Each worker performs only one task repeatedly.
- ii. **Mechanisation:**
Production is done with the help of gadgets and automatic machines which are computer controlled.
- iii. **Technological Innovation:**
New methods of production are innovated/researched and used for quality control, reducing waste and inefficiency, and controlling pollution.
- iv. **Organisational Structure and Stratification:**
The Organization of business is large which consists of CEO's, Managers, executives, workers. Each one performs a specialized task.

DISTRIBUTION OF INDUSTRIES

Q.4 Explain the factors which influence the location of industries in the world.

Ans. Industries maximize profits by reducing costs. Therefore industries are located where the costs are minimum. The factors influencing are:

- i. **Access to Market:**
 - a. Industries are located in areas/regions which have high density of population and high purchasing power. These areas provide large market.
For example -
 - i. Industries are less in remote areas inhabited by a few people.
 - ii. Whereas, in developed regions of Europe, North America, Japan and Australia industries are more because they provide large global markets and the purchasing power of the people is very high.
 - iii. The densely populated regions of South and South-east Asia also provide large markets, thus industries are more.

- ii. **Access to Raw Material:**
 - a. Industries are located where the raw material is cheap and easy to transport.

For example -

 - i. Steel, sugar, and cement Industries are based on cheap, bulky and weight-losing material (ores) therefore they are located close to the sources of raw material.
 - ii. Agro-processing and dairy Industries are located close to farms or dairy because the raw material is perishable.
- iii. **Access to Labour Supply:**
 - a. Some industries require skilled labour therefore they are located near urban-educational centres where skilled labour is easily available.
- iv. **Access to Sources of Energy:**
 - a. Industries which use more power are located close to the source of the energy supply such as the aluminium industry.
- v. **Access to Transportation and Communication Facilities:**
 - a. Speedy and efficient transport and communication facilities reduce the cost of transport and management. Therefore industries are attracted in regions having good transport and communication facilities.

For example -

 - i. Western Europe and eastern North America have a high numbers of industries.
- vi. **Government Policy:**
 - a. Some times industries are located under Government policy of 'regional balance' & economic development.
- vii. **Access to Agglomeration Economies/Links between Industries:**
 - a. Many industries benefit from nearness to a leader-industry and other industries. These benefits are termed as agglomeration economies. Savings are derived from the linkages which exist between different industries. These factors operate together to determine industrial location.

CLASSIFICATION OF INDUSTRIES

Based on Size

- Q.5 Explain three groups of industries classified on the basis of their size.
- Ans. On the basis of capital investment, number of workers and volume of production industries are classified as:
- i. Cottage or household industries:
 - a. It is the smallest manufacturing unit.
 - b. The craftsmen with the help of their family members produce everyday goods within their homes.
 - c. They use locally available raw-material and sell their products in the local markets.
 - d. They use simple tools devised by them to produce goods.
 - e. An e.g. foodstuff, fabrics, shoes, pottery, furniture, mats, etc.
 - ii. Small scale industries:
 - a. The place of manufacturing is outside the home/cottage.
 - b. This type of manufacturing use simple power-driven machines and semi-skilled labour to produce goods.

- c. Raw material is obtained from locally.
 - d. The industries are larger in size than the cottage industries.
 - e. Products are sold beyond local markets.
 - f. They provide employments to large number of people.
 - g. E.g. toys, furniture, edible oil, and leather goods.
- iii. Large scale industries:
- a. These are heavy and capital-intensive industries.
 - b. They use automatic machines and large number of people to produce goods.
 - c. The products are sold in national or international markets.
 - d. Emphasis is given on quality control and production specialization.
 - e. Raw material is obtained from large areas.
 - f. Production is on large scale.

Based on Output

Q.6 Explain two groups of industries classified on the basis of their product.

Ans. On the basis of output/product, industries are classified as:

- i. Basic industries: industries whose products are used to produce other goods by using them as raw materials are called basic industries. For example, iron and steel industry produce steel which is used by other industries as a raw material to produce machines.
- ii. Consumer goods industries: industries which produce goods for direct consumption such as tea, bread, soap and television are known as consumer goods industries.

Based on Inputs/Raw Material

Q.7 Explain the groups of industries classified on the basis of their inputs.

Ans. On the basis of inputs/raw material, industries are classified as:

- i. Agro-based industries:
 - a. Industries which utilize agriculture products as raw materials and produce goods such as cotton textile, tea, sugar and vegetable oil are called agro based industries.
 - b. Major agro-processing industries are food processing, sugar, pickles, fruits juices, beverages (tea, coffee and cocoa), spices and oils fats and textiles (cotton, jute, silk), rubber, etc.
- ii. Forest based industries:
 - a. These industries utilize Forest products as raw material.
 - b. For example paper, furniture industry, lac industries.
- iii. Mineral based industries:
 - a. These industries use minerals as raw materials.
 - b. There are different mineral based industries, for example ferrous (iron) industries which uses metals which have iron content such as iron and steel industry, nonferrous industries which uses metals which do not have iron content such as aluminium industry, Non-metallic industries which uses non-metals such as cement industries.

- iv. Chemical industries
- This industry uses chemicals as raw materials.
 - For example: Mineral oil is used to produce petroleum products, Salt, sulphur industries, Plastics industries.

Based on ownership

Q.7 Explain the groups of industries classified on the basis of their ownership.

Ans. On the basis of ownership, industries are classified as:

- Public industries: when the ownership and management of an industry is in the hands of the State, it is called public sector industry.
- Private sector industries: industries owned and managed by an individual or a corporate body belongs to private sector. Individuals invest their own capital and they manage these industries themselves.
- Joint sector industries: industries owned and managed jointly by the State and private individuals belong to joint sector industries.

TRADITIONAL LARGE SCALE INDUSTRIES

Q.8 State the characteristics of traditional large-scale industrial regions.

Ans. Traditional large-scale industrial regions have following characteristics:

- These are based on heavy industry.
- These are located near coal-fields and engaged in metal smelting, heavy engineering, chemical manufacture or textile production.
- These industries are now known as smokestack industries.

Q.9 Mention the problems faced by the traditional industrial regions.

Ans. Traditional industrial regions can be recognised by:

- High proportion of employment in manufacturing industry.
- High-density housing, often of inferior type, and poor services.
- Unattractive environment, for example, pollution, waste heaps.
- Problems of unemployment, emigration
- Abandoned land areas caused by closure of factories because of a worldwide fall in demand.

HIGH TECHNOLOGY INDUSTRIES

Q.10 State any five important features of high-tech industries.

Ans. High-tech or modern industries have following important features:

- Highly skilled specialist professional (white collar) workers make up a large share of the total workforce.
- Scientific and engineering products are manufacture through intensive research and development.
- Robotics, computer-aided design (CAD), electronic controls are notable examples of a high-tech industry.
- The office & plant buildings are modern & neatly spaced.
- Planned business parks for high-tech industries have been set up.

Q.11 Compare and contrast the features of traditional large-scale industrial regions and modern high-tech industrial parks.

Ans. Traditional large-scale industrial regions and modern high-tech industrial parks differ from each other in following ways:

- Traditional large-scale industrial regions are based on heavy industries whereas the modern high-tech industrial parks are based on small scientific industries.
- Traditional industrial regions are located near source of raw material whereas the modern industrial regions are located near market at the outskirts of cities.
- Traditional industrial regions employ large number of blue collar workers whereas modern industrial regions employ small number of white collar workers.
- Traditional industrial regions are facing environmental problems such as pollution, waste where as modern industrial regions have created green environment around themselves.
- Traditional industrial regions have massive assembly factories, storage areas whereas modern industrial regions have neatly spaced, low density of modern office-plant-lab buildings.

Q.12 What are technopolies?

Ans. High-tech industries which are regionally concentrated, self-sustained and highly specialised are called technopolies. The Silicon Valley near San Francisco and Silicon Forest near Seattle are examples of technopolies.

Q.13 Name five most important manufacturing industries of the world.

Ans. Iron and steel, textiles, automobiles, petrochemicals and electronics are some of the world's most important manufacturing industries.

IRON AND STEEL INDUSTRIES

Q.14 Why iron and steel industry is called basic and heavy industry?

Ans. The iron and steel industry forms the base of all other industries and it provides raw material for other industries therefore it is called a basic industry. For example it provides machine tools which are used for further production of goods. It may also be called a heavy industry because it uses large quantities of bulky raw materials and its products are also heavy.

Q.15 Mention the advantages of mini steel mills over large integrated steel plants.

Ans. New changes have occurred in the manufacturing of steel.

- Mini steel mills prefer their location near markets whereas the large integrated steel industry is located close to the sources of raw materials.
- Mini steel mills are less expensive to build and operate.
- Mini steel mills can be located near markets because of the abundance of scrap metal, which is the main input.
- Mini steel mills are gaining importance over traditional large integrated plants because in mini mills steel is made by just one-step process.

Q.16 Describe the distribution of iron and steel industry in the world.

Ans. The industry is one of the most complex and capital-intensive industries and is concentrated in the advanced countries of North America, Europe and Asia.

- i. In U.S.A, most of the production comes from the north Appalachian region (Pittsburgh), Great Lake region and the Atlantic Coast. Pittsburg area is now losing ground. It has now become the "rust bowl" of U.S.A.
- ii. In Europe, U.K., Germany, France, Belgium, Luxembourg, the Netherlands and Russia are the leading producers.
- iii. In Asia, the important centres include Nagasaki in Japan; Shanghai in China; and Jamshedpur in India.

COTTON TEXTILE INDUSTRIES

Q.17 Describe the three sub sectors of cotton textile industry.

Ans. Cotton textile industry has three sub-sectors i.e. handloom, powerloom and mill sectors.

- i. Handloom sector is labour-intensive and provides employment to semi-skilled workers. It requires small capital investment. This sector involves spinning, weaving and finishing of the fabrics.
- ii. The powerloom sector introduces machines and becomes less labour intensive and the volume of production increases.
- iii. Cotton textile mill sector is highly capital intensive and produces fine clothes in bulk.

Q.18 Mention the problems faced by the cotton textile industry.

Ans. Cotton textile manufacturing requires good quality cotton as raw material.

- i. The industry has to face very stiff competition with synthetic fibres hence it has now shown a declining trend in many countries.
- ii. With the scientific advancement and technological improvements the cotton textile industries has shifted from developed countries to developing countries. This shift is due to low labour costs in less developed countries.