

Ch 6 - Manufacturing Industries

Answer the following briefly in not more than 30 words:

1. What is manufacturing?

A Manufacturing is the process in which goods are produced in large quantities after processing the various raw materials.

2. Name any three physical factors for the location of the industry.

A Three physical factors for the location of the industry are:

- Availability of raw materials - The location of industrial enterprises is sometimes determined simply by the location of the raw materials. The jute mills in West Bengal, sugar mills in Uttar Pradesh, cotton textile mills in Maharashtra and Gujarat are connected close to the sources of raw materials.
- Suitable climate - Harsh climate is not much suitable for the establishment of industries. There can be no industrial development in an extremely hot, humid, dry or cold climate.
- Availability of water and power supply - Many industries are established near rivers, canals and lakes. Iron and steel industry, textile industries and chemical industries require large quantities of water for their proper functioning. Coal, mineral oil and hydro-electricity are the three important conventional sources of power. Most of the industries tend to concentrate at the sources of power.

3. Name any three human factors for the location of industry.

A Three human factors for the location of industry are :

• Availability of cheap labour :-

Labour supply is more important in two respects :

(a) workers in large numbers are often required,

(b) people with a skill or technical expertise are needed.

• Availability of services such as consultants and financial advice.

• Availability of Market - The entire process of manufacturing is useless until the finished goods reach the market. Nearness to market is essential for quick disposal of manufactured goods. It helps in reducing the transport cost and enables the consumer to get things at cheaper rates.

4. What are basic industries ? Give an example.

- A a) Basic industries are those which supply their raw materials to industries which manufacture other goods.
- b) An example is the iron and steel industry which supplies steel to the automobile industry.

5. Name the important raw materials used in the manufacturing of cement ?

- A The important raw materials used in the manufacturing of cement are limestone, silica, alumina and gypsum.

Write the Answers to the following Questions in about 120 words :

1. What are integrated steel plants different from mini steel plants? What problems does the industry face? What recent developments have led to rise in the production capacity?

- A a) • Integrated Steel Plants are large plants which handle everything in one complex - from putting together raw materials to steelmaking, rolling and shaping.
- Mini Steel Plants are smaller, have electric furnaces, use mainly steel scrap and sponge iron as inputs. They have re-rollers that use steel ingots as well. They produce mild and alloy steel of given specifications.

b) Problems of Steel Industry :

- High costs and limited availability of coking coal.
- Lower productivity of labour.
- Irregular supply of power.
- Poor infrastructure.

c) Following are some recent developments that have led to a rise in the production capacity :

- Liberalisation
- Foreign Direct Investment (FDI) with the efforts of private ~~entrepreneur~~ entrepreneurs.
- Improvement in the production process by the use of newer technology.

2. How do industries pollute the environment ?

A Industries are responsible for four types of pollution - air, water, land and noise pollution. Following are the various reasons:

- Air Pollution is caused by the presence of a high proportion of undesirable gases, such as sulphur dioxide and carbon monoxide.
- Water Pollution is caused by organic and inorganic industrial wastes and effluent discharges into rivers.
- Thermal Pollution of water occurs ~~a lot~~ when hot water from factories and thermal plants are drained into rivers and ponds before cooling. Wastes from nuclear plants causes cancers, birth defects and miscarriages. Dumping of wastes especially, glass, harmful chemicals, industrial effluents, packaging, salts and other garbage renders the soil useless.
- Noise Pollution is caused due to industrial and construction activities, factory equipment, generators, electric saws, drills and other machinery.

3. Discuss the steps to be taken to minimise environmental degradation by industry?

A. The steps to be taken to minimise environmental degradation by industry are:

- To control water pollution, industrial effluents need to be treated on all three levels (primary, tertiary, secondary):
 - a) Primary treatment by mechanical means. This involves screening, grinding and flocculation and sedimentation.
 - b) Secondary treatment biological processes.
 - c) Tertiary treatment by biological, ~~processes~~ chemical and physical processes. This involves recycling of water.

- The use of water for processing should be minimised via reuse and recycling; rainwater can be harvested to meet water requirements, and groundwaters usage should be regulated by law.
- For minimisation of air pollution, smokestacks should be fitted for factories with electrostatic precipitators, fabric filters, scrubbers and inertial separators. Also smoke can be reduced by using oil or gas instead of coal.
- Noise pollution can be controlled by fitting generators with silencers, redesigning machinery to reduce noise, and using earplugs and earphones besides other noise absorbing materials.