

Chapter 6

Manufacturing Industries

Q.1A Which one of the following industries uses limestone as a raw material?

- A. Aluminium
- B. Cement
- C. Sugar
- D. Jute

Ans.: The common materials to manufacture cement include: limestone, shells, and chalk.

Q.1B Which one of the following agencies markets steel for the public sector plants?

- A. HAIL
- B. SAIL
- C. TATA Steel
- D. MNCC

Ans.: Steel Authority Of India Limited (SAIL) is one of the largest state-owned steel making company which supplies steel for public sector plants.

Q.1C Which one of the following industries uses bauxite as a raw material?

- A. Aluminium

B. Cement

C. Jute

D. Steel

Ans.: Bauxite is an ore rich in aluminium.

Q.1D Which one of the following industries manufactures telephones, computer, etc.?

A. Steel

B. Aluminium

C. Electronic

D. Information Technology

Ans.: The Electronic manufacturing firms deal with the manufacturing of telephones, computers etc.

Q.2A Answer the following briefly in not more than 30 words.

What is manufacturing?

Ans.: Manufacturing implies to the production of finished more valuable products from raw materials. The finished goods are more expensive as compared to raw materials, thus manufacturing firms earn huge profits by processing raw stuff to finished goods on a large scale.

Q.2B Answer the following briefly in not more than 30 words.

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

Ans.: Three physical factors for the location of the industry are


(a) Raw material is a preliminary for setting up any manufacturing firm, thus location should be such that the raw material is easily available.

(b) Power supply is another basic need to run machines. Thus availability of cheap and efficient power supply must be ensured.

(c) After the goods are produced, they need to be marketed. The firm should be in a location where the manufactured products can be easily marketed.

Q.2C Answer the following briefly in not more than 30 words.

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

Ans.: Three human factors for the location of an industry 

(a) Cheap labour must be available.

(b) There should be easy flow and good flow of capital.

(c) Basic services like banking, insurance, transportation etc must be available.

Q.2D Answer the following briefly in not more than 30 words.

What are basic industries? Give an example.

Ans.: The industries which supply the raw materials to the manufacturers for the production of finished goods are known as Basic industries or Key industries. e.g. iron and steel and copper smelting, aluminium smelting.

Q.2E Answer the following briefly in not more than 30 words.

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

Ans.: Cement is an essential raw material for the for construction of buildings, factories, bridges, roads; airports, dams and for other commercial establishments. The cement industries use bulky and heavy raw materials like limestone, silica, alumina and gypsum.

Q.3A Write the answers of the following questions in 120 words.

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

Ans.: Differences between integrated steel plants and mini steel plants:

integrated steel plants	mini steel plants
1. These are large set ups and possess the ability to handle all work from raw material processing to the production of finished good products.	These plants are comparatively smaller, they have electric furnaces, and make use of the steel scarp and sponge iron to produce mild and alloy steel of given specifications.
2. These plants serve the local as well as international market.	These plants mainly serve the needs of local market.
3. Huge investment is required for the establishment and running of these plants.	3. Less investment is required for setting up and running mini plants.
4. India has 10 integrated steel plants, located in various parts of the country.	More than 400 steel plants are present in India.

Despite immense potential India is not able to give up to the mark production values, mainly due to the underlying reasons:

(a) High costs and limited availability of coking coal,

(b) Inefficiency of the labour

(c) Irregular energy supply

(d) Low quality infrastructure

Liberalisation and Foreign Direct Investment (FDI) have given a boost to the industry with the efforts of private entrepreneurs.

Q.3B Write the answers of the following questions in 120 words.

How do industries pollute the environment?

Ans.: The rapid growth in industries has led to considerable economic growth. However, apart from the benefits it has also contributed to the increase in pollution of land, water, air, noise resulting in degradation of the environment. Industries contribute to the following five types of pollution:

(a) Air pollution: The paper factories, chemic factories, pulp, chemical, dyeing and textile industries emit out large amount of smoke. This smoke releases a high amount of undesirable gases, such as sulphur dioxide and carbon monoxide in the air which contribute to the air pollution. If there is any leakage of toxic gases it can be very hazardous with long-term effects. It can potentially affect the human health, animals, plants, buildings and the atmosphere as a whole.

(b) Water pollution: Many industries including the paper industries, chemical industries and textiles industry release harsh chemical substances and other untreated wastes materials into the water resources leading to water pollution. Agriculture and fertiliser wastes when dumped in the water bodies contribute to lead and mercury poisoning in the water

bodies which make the water unfit for the flora and fauna of the hydrosphere.

(c) Thermal pollution: If hot water from industries is discharged into the water bodies without cooling, it leads to thermal pollution.

(d) Land pollution: Dumping of wastes specially glass, harmful chemicals, industrial effluents, packaging, salts and garbage alters the fertility of the soil and makes it polluted. The seepage of chemical from these wastes via rainwater contaminate the groundwater and increases the concentration of toxic metals such as lead and mercury into the underground water.

(e) Noise pollution: Industrial and construction activities, machinery, factory equipment, generators-, electric drills, etc contribute to noise pollution. Noise pollution tends to cause irritation and anger, the effects are more harmful in people suffering from high BP and in infants. It can lead to hearing impairment, increased heart-beat and blood pressure.

Q.3C Write the answers of the following questions in 120 words.

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

Ans.: To stop environmental degradation, following steps can be opted:

- Reuse water and recycle water to minimise the wastage.
- Rainwater harvesting must be promoted.
- Replace coal with oil and gases to reduce the emission of smoke.
- Fix generators with silencers to reduce noise pollution.

- Use Earplugs and earphones to save from excessive noise.
- Treat the water before discharging into the rivers.

Activity:

Q.1 Give one word for each of the following with regard to industry. The number of letters in each word are hinted in brackets.

(i) Used to drive machinery	(5) P.....
(ii) People who work in a factory	(6) W.....
(iii) Where are product is sold	(6) M.....
(iv) A person who sells good	(8) R.....
(v) Thing produced	(7) P.....
(vi) To make or produced	(11) M.....
(vii) Land, pond and air degraded	(9) P.....

Ans.:

- (i) POWER is the basic requirement to run machines in any industrial set up.
- (ii) WORKER or the labours constitute for the man power required to handle machinery.
- (iii) MARKET are the areas where products are sold by the manufacturers to the wholesalers or via retailers to the consumers.
- (iv) RETAILER sells goods to the consumers.
- (v) PRODUCT are produced as the final moiety in the manufacturing procedure.
- (vi) MANUFACTURE is the process to make goods.
- (vii) POLLUTION degrades the land, air, waters and soil resources.

Q.2 Solve the puzzle by following your search horizontally and vertically to find the hidden answers:

G	G	G	P	V	A	R	A	N	A	S	I
U	O	J	I	P	G	X	K	M	Q	W	V
K	S	U	G	A	R	C	A	N	E	E	N
O	T	T	O	N	O	Z	V	O	P	T	R
A	U	E	L	U	B	H	I	L	A	I	U
T	K	O	C	R	A	Q	N	T	R	L	N
E	I	R	O	N	S	T	E	E	L	S	J
E	N	A	N	O	E	P	I	T	L	R	Y
G	A	N	U	J	D	R	A	G	D	T	A
N	T	A	R	P	O	A	P	U	E	P	Y
A	S	N	A	E	N	J	D	I	Y	S	K
S	M	H	V	L	I	A	J	H	S	K	G

1. Textiles, sugar, vegetable oil and plantation industries deriving raw materials from agriculture are called.
2. The basic raw material for sugar industry.
3. This fibre is also known as the 'Golden Fibre'.
4. Iron ore, coking coal, and limestone are the chief raw materials of this industry.
5. A public sector steel plant located in Chhattisgarh.
6. Railway diesel engines are manufactured in Uttar Pradesh at this place.

Ans.:

G	G	G	P	V	A	R	A	N	A	S	I
U	O	J	I	P	G	X	K	M	Q	W	V
K	S	U	G	A	R	C	A	N	E	E	N
O	T	T	O	N	O	Z	V	O	P	T	R
A	U	E	L	U	B	H	I	L	A	I	U
T	K	O	C	R	A	Q	N	T	R	L	N
E	I	R	O	N	S	T	E	E	L	S	J
E	N	A	N	O	E	P	I	T	L	R	Y
G	A	N	U	J	D	R	A	G	D	T	A
N	T	A	R	P	O	A	P	U	E	P	Y
A	S	N	A	E	N	J	D	I	Y	S	K
S	M	H	V	L	I	A	J	H	S	K	G

Project work:

Q.1 Select one agro-based and one mineral-based industry in your area.

(i) What are the raw materials they use?

(ii) What are the other inputs in the process of manufacturing that involve transportation cost?

(iii) Are these factories following environmental norms?

Ans.: i) Cement industry uses raw materials like gypsum, limestone, etc.

ii) Other inputs such as gypsum and other raw materials also require transportation to the site of manufacturing and thus incur a transportation cost.

ii) Yes, the factory is situated at an area outside the residential zones, it follows the guidelines to control pollution.