

Lesson No. 5

Manufacturing Industries

I. Importance of Manufacturing :

Manufacturing sector is considered the backbone of development in general and economic development.

- (i) Manufacturing industries helps in modernising agriculture.
- (ii) It reduce the heavy dependence of people on agriculture income by providing them jobs.
- (iii) Helps in eradication of unemployment & poverty.
- (iv) Helps in bringing down regional disparities.
- (v) Exports of manufactured goods expand trade & commerce.

II. Iron and Steel Industry :

- Iron and steel industry is the basic industry steel is needed to manufacture a variety of engineering goods, construction material, defence, medical, telephonic, scientific equipment and variety of consumer goods.
- Iron and steel industry is a heavy industry because all raw material as well as finished goods are heavy and bulky entailing heavy transportation costs. Iron ore, coking coal and lime stone are required in 4 : 2 : 1
- India is an important iron and steel producing country in the world yet we lag behind because.
 - (a) High costs and limited availability of coking coal.
 - (b) Lower productivity of labour.
 - (c) Irregular supply of energy.
 - (d) Poor infrastructure.

III. Industrial Pollution and Environmental Degradation :

Industries contribute significantly to India's economic growth and development but increase in pollution results in degradation of environment.

4 Types of Pollution :

- (a) **Air** : caused by undesirable gases such as sulphur dioxide and carbon monoxide, air borne particles such as dust, sprays, mist & smoke.
- (b) **Water Pollution** : Caused by organic & inorganic industrial wastes such as release of lead, mercury pesticides, fertilizers, synthetic chemical, plastics, rubber, fly ash, phosphogypsum etc.
- (c) **Thermal Pollution** : Caused by nuclear power plants nuclear & weapon

production cause cancers birth defects & miscarriages.

- (d) **Noise Pollution** : Cause hearing impairment, increased heart rate & blood pressure by making unwanted noise.

(IV) Control of Environment Degradation :

- Minimising the use of water by reusing recycling.
- Harvesting rainwater to meet water requirement.
- Treatment of hot water and effluents before releasing in ponds & rivers, involves 3 steps.
 1. Primary treatment by mechanical means.
 2. Secondary treatment by biological process.
 3. Tertiary treatment by biological chemical & physical processes.

Answer the following Questions :

1. Describe the importance of Industries in the Economic development of a country?
2. Why iron and steel industry is called the basic industry?
3. Name the important raw material used in the manufacturing of iron and steel.
4. Critically examine how industries causes the environmental degradation?
5. Suggest some measures to control environmental degradation?