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 sulpher 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 heaving 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?