Case Study Questions

Case Study – 1

1.) Read the text given below and answer the following questions. Manufacturing industries not only help in modernizing agriculture, which forms the backbone of our economy, they also reduce the heavy dependence of people on agricultural income by providing them jobs in secondary and tertiary sectors. Industrial development is a pre condition for eradication of unemployment and poverty from our country. This was the main philosophy behind public sector industries and joint sector ventures in India. It was also aimed at bringing down regional disparities by establishing industries in tribal and backward areas. Export of manufactured goods expands trade and commerce, and brings in much needed foreign exchange. Countries that transform their raw materials into a wide variety of finished goods of higher value are prosperous. India's prosperity lies in increasing and diversifying its manufacturing industries as quickly as possible. Agriculture and industry are not exclusive of each other. They move hand in hand. For instance, the agro-industries in India have given a major boost to agriculture by raising its productivity.

Answer the following MCQs by choosing the most appropriate option:

1.) Manufacturing industries fall in and agriculture in
A. Primary, Secondary Sector
B. Secondary, Tertiary Sector
C. Primary, Tertiary Sector
D. Secondary, Primary Sector
2.) Which of the following options does not help in modernising agriculture?

- A.) Manufacturing farm equipment
- B.) Providing unskilled labour force
- C.) Supplying fertilizers and pesticides
- D.) Producing tube well pumps and sprinklers

3.) In order to attract foreign manufacturing firms, a country needs to develop –

- A.) Agrarian facilities
- B.) Cultivable lands
- C.) Media facilities
- D.) Infrastructure facilities

Solutions:-

- (1) D) Secondary, Primary Sector
- (2) B) Providing unskilled labor force
- 3) D) Infrastructure facilities

Case Study – 2

Every litre of waste water discharged by our industry pollutes eight times the quantity of freshwater. How can the industrial pollution of fresh water be reduced? Some suggestions are-

(i) Minimising use water for processing by reusing and recycling it in two or more successive stages

(ii) Harvesting of rainwater to meet water requirements

(iii) Treating hot water and effluents before releasing them in rivers and ponds.

Treatment of industrial effluents can be done in three phases

(a) Primary treatment by mechanical means. This involves screening, grinding, flocculation and sedimentation.

(b) Secondary treatment by biological process O Tertiary treatment by biological, chemical and physical processes.

This involves recycling of wastewater. Overdrawing of groundwater reserves by industry where there is a threat to ground water resources also needs to be regulated legally. Particulate matter in the air can be reduced by fitting smoke stacks to factories with electrostatic precipitators, fabric filters, scrubbers and inertial separators. Smoke can be reduced by using oil or gas instead of coal in factories. Machinery and equipment can be used and generators should be fitted with silencers. Almost all machinery can be redesigned to increase energy efficiency and reduce noise. Noise absorbing material may be used apart from personal use of earplugs and earphones. The challenge of sustainable development requires integration of economic development with environmental concerns

1.) How many treatments are there for industrial effluents? Name them.

a.) There are three treatments: industry treatment, garbage treatment, and chemical treatment.

b.) There are three treatments: house treatment, school treatment, and road treatment.

c.) There are three treatments: primary treatment, secondary treatment, and tertiary treatment.

d.) There are three treatments: private treatment, public treatment, and joint treatment.

2.) How could particulate matter in the air be reduced?

a.) Particulate matter in the air can be reduced by fitting smoke stacks to schools with electrostatic. precipitators, fabric filters, scrubbers and inertial separators. Smoke can be reduced by using water or gas instead of coal in factories.

b.) Particulate matter in the air can be reduced by fitting smoke stacks to factories with electrostatic precipitators, fabric filters, scrubbers and inertial separators. Smoke can be reduced by using oil or gas instead ofcoal in factories.

c.) Particulate matter in the air can be reduced by fitting smoke stacks to factories with hydrostatic precipitators, fabric filters, scrubbers and inertial separators. Smoke can be reduced by using petrol or gas instead of coal in factories.

d.) Particulate matter in the air can be reduced by fitting smoke stacks to houses with hydrostatic precipitators, fabric filters, scrubbers and inertial separators. Smoke can be reduced by using oil or gas instead of coal in schools

3) What could be done to reduce pollution of machinery and equipment?

a.) Machinery and equipment can be used and generators should be fitted with knifes. Almost all machinery can be redesigned to decrease energy efficiency and reduce noise.

b.) Machinery and equipment can be used and generators should be fitted with silencers. Almost all machinery can be redesigned to decrease energy efficiency and increase noise.

c.) Machinery and equipment can be used and generators should be fitted with noisier. Almost all machinery can be redesigned to increase energy efficiency and reduce noise.

d.) Machinery and equipment can be used and generators should be fitted with silencers. Almost all machinery can be redesigned to increase energy efficiency and reduce noise.

Solutions –

1) c.) There are three treatments: primary treatment, secondary treatment, and tertiary treatment.

2) b.) Particulate matter in the air can be reduced by fitting smoke stacks to factories with electrostatic precipitators, fabric filters, scrubbers and inertial separators. Smoke can be reduced by using oil or gas instead of coal in factories.

3) d.) Machinery and equipment can be used and generators should be fitted with silencers. Almost all machinery can be redesigned to increase energy efficiency and reduce noise.

Source – KVS Raipur Question Bank