



Question 1. Explain the term 'infrastructure'.

Answer. Infrastructure refers to the basic supporting structure which is built to provide different kinds of services in an economy. Infrastructural installations do not directly produce goods but help in promoting production activities in an economy. Examples of infrastructure are: transport, communication, banking, power etc.

Question 2. Explain the two categories into which infrastructure is divided. How are both interdependent?

Answer. There are two types of infrastructure: (a) economic infrastructure, (b) social infrastructure.

Economic infrastructure directly supports the economic system from inside. Examples are energy, transport and communication.

Social infrastructure indirectly supports the economic system from outside. Examples are health, education and housing.

Economic and social infrastructure are complementary to each other. Economic infrastructure improves the quality of economic resources and raises the production, but it cannot be possible until population is literate to use them efficiently. Thus, both of them are needed for the growth and development of the country.

Question 3. How do infrastructure facilities boost production?

Answer. The prosperity of a country depends directly upon the development of agricultural and industrial production. Agricultural production requires power, credit, transport facilities, etc.; the deficiency of which leads to fall in productivity. Industrial production requires machinery and equipment, energy, banking and insurance facilities, marketing facilities, transport services which include railways, roads and shipping and communication facilities etc. All these facilities help in raising agricultural and industrial productivity.

Question 4. Infrastructure contributes to the economic development of a country. Do you agree? Explain.

Answer. Infrastructure contributes to the economic development of a country and it is an important determinant of its growth and development. It raises productivity, induces investment in different areas of economic activity, raises size of the market, facilitates outsourcing and employment. Thus, it is an essential support system for the economic development of the country.

Question 5. What is the state of rural infrastructure in India?

Answer. A majority of people live in rural areas. The state of rural infrastructure in India is as follows:

1. Rural women are still using bio-fuels such as crop residues, dung and fuel wood to meet their energy requirement.
2. They walk long distances to fetch fuel, water and other basic needs.
3. The census 2001 shows that in rural India only 56 per cent households have an electricity connection and 43 per cent still use kerosene. About 90 per cent of the rural households use bio-fuels for cooking.
4. Tap water availability is limited to only 24 per cent of rural households. About 76 per cent of the population drinks water from open sources such as wells, tanks, ponds, lakes, rivers, canals, etc.

5. Another study conducted by the National Sample Survey Organisation noted that by 1996, access to improved sanitation in rural areas was only 6 per cent.

Question 6. What is the significance of 'energy'? Differentiate between commercial and non-commercial sources of energy.

Answer. Energy is a critical aspect of development process of a nation. It is essential for industries, agriculture and related areas like transportation of finished goods. It is also used for domestic purposes like cooking, lighting, heating, etc.

Difference between Commercial and Non-commercial Sources of Energy

Question 7. What are the three basic sources of generating power?

Answer. Sources of generating power are:

1. water—it gives hydroelectricity.
2. oil, gas, coal—they give thermal electricity.
3. radioactive elements like uranium, plutonium—they give atomic power or nuclear power.

Question 8. What do you mean by transmission and distribution losses? How can they be reduced?

Answer. Transmission and Distribution (T&D) losses refer to theft of power which has not been controlled.

Nation's average loss is 23%.

T&D losses can be reduced by having:

1. Appropriate size of conductors
2. Proper load management
3. Meter supply
4. Privatisation of distribution work
5. Introduction of energy audits. Some steps have already been initiated in this direction.

Question 9. What are the various non-commercial sources of energy?

Answer. Vegetable wastes, firewood and dried dung.

Question 10. Justify that energy crisis can be overcome with the use of renewable sources of energy.

Answer. There is energy crisis in the country. The demand for all commercial fuels is more than its supply.

Government is encouraging the use of hydel and wind energy.

Bio-gas generation programmes have been boosted up. For a tropical country like India, where sun is an abundant source, solar energy should be given highest priority.

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