

# **INFRASTRUCTURE**

## **Multiple Choice Type Questions**

1. Which of the following statements is not correct with regards to infrastructure?
  - a. Infrastructure contributes to economic development.
  - b. Infrastructure provides support services.
  - c. All infrastructural facilities have a direct impact on the production of goods and services.
  - d. Inadequate infrastructure can have multiple adverse effects on health.
2. Which of the following facilities is included in social infrastructure?
  - a. Roads and highways
  - b. Housing
  - c. Internet
  - d. Electricity
3. What is morbidity?
  - a. Proneness to fall ill
  - b. High infant mortality rate
  - c. High maternal mortality rate
  - d. Low life expectancy
4. What percent of rural households use bio-fuels for cooking?
  - a. 50 percent
  - b. 75 percent
  - c. 80 percent
  - d. 90 percent
5. Which of the following countries invest almost 50 percent of its GDP in infrastructure?
  - a. India
  - b. China
  - c. Pakistan
  - d. Sri Lanka

## **Answer**

1. (c)      2. (b)      3. (a)      4. (d)      5. (B)

## **Short Question Answer**

1. Explain the significance of social infrastructure.

### **Answer:**

The significance of social infrastructure lies in the following:

(i) It helps in the healthy and robust growth of the young generation so that they become an efficient manpower tomorrow.

- (ii) Social infrastructure helps in the growth of literacy, which in turn helps in the growth of the society.
- (iii) Social infrastructure helps in the skill formation, which is an important parameter in the context of economic growth.
- (iv) It helps in improving and providing a quality life to the people.
- (v) Social infrastructure helps in the formation of human capital, which complements the physical capital to form an efficient system of growth and development

2. Which sources of energy are encouraged by India's energy policy? Why?

**Answer:** India's energy policy encourages hydel and wind energy as India has great potential in the use of a renewable source of energy. The use of renewable energy sources can ensure additional supply of power. Moreover, these sources do not rely on fossil fuel and hence, avoid carbon emissions. Greater reliance on renewable energy resources offers enormous economic, social and environmental benefits.

3. What problems are faced by State Electricity Boards?

**Answer:**

The following problems are faced by State Electricity Boards:

(i) SEBs suffer transmission and distribution losses, thereby making the economics of power generation completely unbalanced.

(ii) The pattern of investments being made in power generation is inappropriate. It leads to sharp increase in the cost per unit of electricity.

(iii) The high cost of power imposed on the industry, which is the backbone of the SEBs, is hindering the grid in gaining control and hence, worsening the crisis of the SEBs.

4. Highlight the points that reflect development in the health services after independence in India.

**Answer:**

The following points reflect development in the health services after independence in India:

(i) Decline in Death rates: Death rate has come down from as high as 27.4 per thousand in 1951 to 6.3 per thousand in 2015.

(ii) Reductions in Infant Mortality: Infants mortality rate has significantly reduced from 140 per thousand in 1951 to 32 per thousands in 2015.

(iii) Rise in Life Expectancy: Expectancy of life has risen from 50 years in 1951 to 68.3 years in 2015.

5. Mention some premier institutions that provide specialised health care in India.

**Answer:** Some premier institutions that provide specialised health care in India are:

- All India Institute of Medical Science (AIIMS), New Delhi
- Post Graduate Institute, Chandigarh
- Jawaharlal Institute of Postgraduate Medical Education and Research, Pondicherry
- National Institute of Mental Health and Neuro Sciences, Bangalore
- All India Institute of Hygiene and Public Health, Kolkata.

## **LONG ANSWER QUESTION**

1. Why is it important to conserve energy?

**Answer:** It is important to conserve energy due to the following reasons:

(i) **Resources are limited.** India has only 1 percent of world's energy resources but it accounts for 16 percent of world population.

(ii) **Resources take long time for formation.** Coal and petroleum are the most widely used sources of energy. They take thousands of years for formation.

(iii) **Resources are non-renewable.** Non-renewable resources are those which get exhausted with extraction and use. Non-renewable energy sources constitute 80 percent of the fuel use. If we continue to use such resources at present rate, these will be soon depleted.

(iv) **Use of resources involves high cost.** About 75 percent of our crude oil needs depend on imports, which cost about ₹ 1,50,000 crore a year. The cost is passed on to the consumers by means of higher prices of goods and services.

(v) **Environment needs protection.** Sources which rely on fossil fuel emit huge amounts of carbon dioxide in the atmosphere. Energy production accounts to large proportion of air pollution and more than 83 percent of greenhouse gas emissions. According to a wise saying – “The earth, water and the air are not a gift to us from our parents but a loan from our children. Hence, we need to make energy conservation a habit.”

2. Solar energy, wind power and power produced from tides are going to be future sources of energy. What are their comparative merits and demerits?

**Answer:**

**Merits of Solar Energy**

- (i) It is available free of cost.
- (ii) It is a renewable source of energy.
- (iii) It does not cause pollution.
- (iv) Solar energy can be used in remote areas where it is too expensive to extend the electricity power grid.
- (v) Everyday items such as calculators and other low power consuming devices can be powered by solar energy effectively.

**Demerits of Solar Energy**

- (i) Solar energy can be harnessed only during daytime.
- (ii) It cannot be obtained during rainy days.
- (iii) Solar collectors, panels and cells are relatively expensive.
- (iv) Large areas of land are required to capture the sun's energy.

**Merits of Wind Power**

- (i) Wind power is an inexhaustible source of energy and is virtually a limitless resource.
- (ii) Energy is generated without polluting environment.
- (iii) It has tremendous potential to generate energy on large scale.
- (iv) Wind power can be used directly as mechanical energy.

**Demerits of Wind Power**

- (i) Wind power requires expensive storage during peak production time.
- (ii) It requires large open areas for setting up wind farms.
- (iii) It is an unreliable source as winds are uncertain and unpredictable.
- (iv) The problem of noise pollution is usually associated with wind mills.

### Merits Tidal Power

- (i) Tidal energy is completely renewable.
- (ii) It is a relatively reliable source of energy.
- (iii) A tidal barrage has a very long life of around 100 years.
- (iv) It is free from pollution.
- (v) Its costs are extremely low.

### Demerits of Tidal Power

- (i) It requires massive investment to construct a tidal barrage or dam.
- (ii) It has adverse effect on marine life.
- (iii) It is difficult to transmit electricity generated from tides.

3. Discuss the state of health infrastructure in rural areas of India.

**Answer :** The following points highlight the state of health infrastructure in rural areas of India:

(i) People living in rural areas do not have sufficient medical infrastructure as

- only one-fifth of the country's hospitals and only about half the number of dispensaries are located in rural areas; and
- Out of 6.3 lakh beds in the entire country, only 30 percent are available in rural areas.

(ii) There are only 0.36 hospitals for every one lakh people in rural areas.

(iii) The PHCs located in rural areas do not provide basic facilities such as X-ray or blood testing.

(iv) In rural areas, the percentage of people who have no access to proper care has increased over the last few years.

(v) Rural population has no access to any specialised medical care such as pediatrics, gynecology, anesthesia and obstetrics

4. Explain the three-tier system of health infrastructure and health care in India.

**Answer:** The three-tier system of health infrastructure and health care in India is as below:

(i) **Primary Health Care:** It includes education related to existing health problems and methods to identify, prevent and control them. It also constitutes promotion of food supply and proper nutrition; adequate water supply and sanitation; maternal and child health care; etc. In order to provide primary health care, Primary Health Centres (PHC), Community Health Centres (CHC) and sub-centres have been set up in villages and small towns.

(ii) **Secondary Health Care:** When PHCs are unable to manage the condition of a patient, they are referred to secondary hospitals. Secondary health care institutions include hospitals which have better facilities for surgery, X-ray and Electro Cardio Gram (ECG). They are mostly located in district headquarters and big towns.

(iii) **Tertiary Health Care:** Hospitals under the tertiary sector have advanced level equipment and medicines. They undertake all the complicated health problems, which could not be managed by primary or secondary hospitals. This sector also includes many premier institutes, which provide specialised health care not along with imparting quality medical education and conducting research