CBSE Test Paper - 04

Chapter - 11 Water Resources

1. In _____ , a remote backward village in Mysuru, Karnataka, villagers have installed, in their household's rooftop, rainwater harvesting system to meet their water needs. **(1)**

    a. Banglore
    b. Gendathur
    c. Belagavi
    d. Chennai

2. Today, in India hydroelectric power contributes approximately ____ per cent of the total electricity produced **(1)**

    a. 60
    b. 52
    c. 22
    d. 70

3. _____ per cent of the freshwater occurs as ice sheets and glaciers in Antarctica, Greenland and the mountainous regions of the world **(1)**

    a. 60
    b. 90
    c. 50
    d. 70

4. Dams have transformed the social landscape i.e. increasing the social gap between_____. **(1)**

    a. villages, rural areas
    b. the richer landowners and the landless poor.
    c. districts & villages
    d. urban areas, cities

5. In the flood plains of Bengal, people developed_____ to irrigate their fields. **(1)**

    a. the ‘guls’ or ‘kuls’
    b. inundation channels
    c. Dams
    d. Lakes

6. Name two social movements which were against the multipurpose projects. **(1)**

7. Which river is known as “River of Sorrow” in Jharkhand and West Bengal? **(1)**

8. Name the river on which the Koyna and Nagarjuna Sagar dams are located. **(1)**

9. Mention three major sources of irrigation in India. Which source of irrigation is more popular in southern states? Why? **(1)**

10. Why do we need to conserve and manage our water resources? **(3)**

11. Why we should conserve and manage our water resources? **(3)**

12. How do the dams create conflicts between the people? **(3)**

13. Explain any three human values to reduce water wastage. **(3)**

14. Three-fourth of the world is covered with water and water is a renewable resource. Yet many countries and regions around the globe suffer from water scarcity. Explain. **(5)**

15. Explain any three reasons responsible for water scarcity in India? **(5)**

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Answers

1. b. Gendathur
   Explanation: Gendathur is a very remote backward village in Karnataka where nearly 200 houses have installed this roof top rainwater harvesting system and it has earned the rare distinction of being rich in rainwater.
2. c. 22
   Explanation: Much of this energy comes from hydroelectric power. Today, in India hydroelectric power contributes approximately 22 per cent of the total electricity produced.
3. d. 70
   Explanation: 70 per cent of the freshwater occurs as ice sheets and glaciers in Antarctica, Greenland and the mountainous regions of the world
4. b. the richer landowners and the landless poor.
   Explanation: At the same time, it has transformed the social landscape i.e. increasing the social gap between the richer landowners and the landless poor. As we can see, the dams did create conflicts between people wanting different uses and benefits from the same water resources.
5. b. inundation channels
   Explanation: In the flood plains of Bengal, people developed inundation channels to irrigate their fields. Rooftop rain water harvesting' was commonly practised to store drinking water, particularly in Rajasthan.
6. Multi-purpose projects and large dams have also been the cause of many new environmental movements like the 'Narmada Bachao Andolan' and the 'Tehri Dam Andolan'
7. Damodar River
8. The Koyna and Nagarjuna Sagar dams are located on river Krishna.

9. The three major sources of irrigation in India are:

    i. Canals
    ii. Wells and tube wells
    iii. Tanks

    Tank irrigation is most popular in southern states because these states mostly come under Deccan plateau which is not suitable for irrigation by canals. South India does not have perennial rivers and hence the tanks form an important source of irrigation.

10. We need to conserve and manage water resources as-

    i. Water is essential for life. So, there is a need to conserve water resources.
    ii. We need to ensure food security.
    iii. We need water for continuation of our livelihood and productive activities.
    iv. We need water to safeguard ourselves from health hazards.

11. We should conserve and manage our water resources -

    i. To maintain the water cycle.
    ii. To overcome the problem of water scarcity.
    iii. To stop the excessive use, overutilization and unequal access to water among different social groups.
    iv. Variation in seasonal and annual precipitation may affect the availability of water over time and space so there is a need of water management.

12. i. The dams have created conflicts between people wanting different uses and benefits from the same water resources.
    ii. Inter-state water disputes are becoming common with regard to sharing the costs and benefits of the projects.
    iii. The landowners, the rich farmers. Industrialists and urban centers are benefitting at the cost of local communities.

13. The three human values to reduce water wastage are:

    i. **Awareness:** The public should be made aware about the water scarcity and causes of shortage of water.

ii. **Judicious usage:** People should use water wisely and in a planned way.
iii. **Check over-irrigation:** Over-irrigation should be stopped.
iv. **Conservation:** The habit of conserving water needs to be developed among the people.

14. We know that three-fourth of the earth's surface is covered with water, but only a small proportion of its accounts for freshwater that can be put to use. This freshwater mainly obtained from surface run off and ground water that is continually being renewed and recharged through the hydrological cycle ensuring that water is a renewable resource. 96.5 percent of the total volume of world's water is estimated to exist in oceans and only 2.5 per cent as fresh water. Nearly 70% of this fresh water occurs as ice sheets and glaciers in Antarctica, Greenland and the mountainous regions of the world, while a little less than 30 percent is stored as groundwater in world's aquifers.
15. i. The problem has been compounded with increased concretization due to urban development that has choked groundwater resources. Water is neither being recharged nor stored in ways that optimize its use while retaining the natural ingredients of water. In addition, the entry of sewage and industrial waste into water bodies is severely shrinking the availability of potable water.
ii. A large population means more water to produce more food. Hence, to facilitate higher food-grain production, water resources are being overexploited to expand irrigated areas for dry-season agriculture.
iii. Most farmers have their own wells and tubewell in their farms for irrigation to increase their production. But it may lead to falling groundwater levels, adversely affecting water availability and food security of the people. Thus, in spite of abundant water, there is water scarcity.