Geography Class 10 Important Question Chapter 3 Water Resources

1. Why dams are now referred as multipurpose projects?

- **Ans.** a. Dams are now referred to as multipurpose projects as the uses of the impounded water are in integration with one another.
- b. Dams are constructed to flood control, irrigation, generation and distribution of electricity.
- c. Dams are constructed to conserve water, vegetation and soil.
- d. It also helps to promote tourism.

2. Highlight the reverse effects of dams on aquatic life and vegetation.

- **Ans.** a. Regulating and damming of rivers affect the natural flow of rivers, causing poor sediment flow and excessive sedimentation at the bottom of the reservoir, resulting in rockier stream beds and poorer habitats for the rivers' aquatic life.
- b. Dams also fragment rivers making it difficult for aquatic fauna to migrate, especially for spawning.
- c. The reservoirs that are created on the flood plains also submerge the existing vegetation and soil leading to its decomposition over a period of time.

3. Mention the negative effect of over irrigation?

- **Ans.** a. This has great ecological consequences like Stalinization of the soil.
- b. Decrease the soil fertility.
- c. It leads to water scarcity.

4. How can irrigation transform the social landscape?

- **Ans.** a. Irrigation has also changed the cropping pattern of many regions with farmerd shifting to water intensive and commercial crops.
- b. This has great ecological consequences like Stalinization of the soil.
- c. At the same time, it has transformed the social gap between the richer land owner and the landless poor farmers.

5. How dams are responsible for creating conflicts between people of same society? Explain with example.

Ans. a. The dams did create conflicts between people wanting different uses and benefits from the same water resources.

b. In Gujarat, the Sabarmati-basin farmers were agitated and almost caused a riot over the higher priority given to water supply in urban areas, particularly during droughts.

6. Explain the quantitative aspects of water scarcity.

Ans. a. Let us consider another situation where water is sufficiently available to meet the needs of the people, but the area still suffers from water scarcity.

b. This scarcity may be due to bad quality of water. Lately there has been a growing concern that even if there is ample water to meet the needs of the people, much of it may be polluted by domestic and industrial wastes, chemicals, pesticides and fertilizers used in agriculture, thus, making it hazardous for human use.

7. Highlight the facts given by The Citizens' Fifth Report, CSE, 1999.

Ans. a. India's rivers, especially the smaller ones, have all turned into toxic streams.

- b. And even the big ones like the Ganga and Yamuna are far from being pure.
- c. The assault on India's rivers-from population growth, agricultural modernization, urbanization and industrialization-is enormous and growing day by day.
- This entire life stands threatened.

8. What do you know about Krishna Godavari Dispute?

Ans. a. The Krishna Godavari dispute is based on the objections raised by the Governments of Karnataka and Andhra Pradesh.

- b. The reason is diversion of more water flow at Koyna by the Maharashtra Government for irrigation and a hydro electricity project.
- c. It was felt that this would lessen the flow in their states which would have adverse affects on industry and agriculture.

9. What is rain water harvesting? State the objectives of rainwater harvesting.

Ans. a. Rain water harvesting as a method of utilizing rainwater for domestic and agriculture use is already widely used throughout the world.

- b. It has become a widely accepted technique of providing potable water in development projects all over the world.
- c. Rain water harvesting is done for storing rainwater in containers above or below the ground.
- d. Rainwater harvesting is done for charging into soil for withdrawal later.

10. What are benefits of rainwater harvesting?

- Ans. a. Rainwater harvesting increases water availability.
- b. It checks the declining water table.
- c. It is environment friendly.
- d. Rainwater harvesting improves the quality of groundwater through the dilution of fluoride, nitrate and salinity.
- e. Prevent soil erosion and flooding especially in urban areas.

11. Explain any three human values to reduce water wastage.

Ans. a. The Public should be made aware about the water scarcity and causes of shortage of water.

- b. People should use water wisely and in a planned way.
- c. Over irrigation should be stopped.
- d. The habit of conserving water needs to be developed among the people.

12. What can be the effects of over-exploitation and excessive use of water resources?

- **Ans.** a. Deletion of water resources.
- b. Degradation of our natural ecosystem.
- c. Shortage of availability of food which may adversely affect food security in the country. Serious health hazards
- 13. Describe the qualitative aspect of water scarcity.

Ans. According to qualitative aspects of water scarcity, it is a situation where water sufficiently available to meet the needs of the people, but, the area still suffers from water scarcity. This scarcity may be due to bad quality of water. Lately, there has been a growing concern that even if there is ample water to meet the needs of the people, much of it may be polluted by domestic and industrial wastes, chemicals, pesticides and fertilizers used in agriculture, thus, making it hazardous for human use.

14. Why are dames now referred to as multi-purpose projects?

Ans. Today dams are built not just for irrigation but for electricity generation, water supply for domestic and industrial use, flood control, recreation, inland navigation and fish breeding. Hence, dams are now referred to as multipurpose projects where the many uses of the impounded water are integrated with one another. For example, in the Sutlej-Beas river basin, the Bhakra- Nangal project water is being used both for hydel power production and irrigation. Similarly, the Hirakud project in the Mahanadi basin integrates conservation of water with flood control.

15. What are the difference between traditional dams and multi-purpose projects?

- **Ans.** a. Traditional dams were built to impound rivers and rainwater that could be used later to irrigate agricultural fields only but now multipurpose projects are built not just for irrigation.
- b. But for electricity generation, water supply for domestic and industrial use, flood control, recreation, inland navigation and fish breeding.
- c. Hence, dams are now referred to a multiple river projects where the many uses of the impounded water are integrated with one another.

16. How were the understand 'Tankas' beneficial to the people of Rajasthan?

- **Ans.** a. The underground tankas were able to provide reliable sources of drinking water during summer when other sources had dried up.
- b. The rainwater or palar pani was considered to be purest form of water.
- c. They would help in keeping the room cool to manage the hot summer.
- 17. Why is rooftop rainwater harvesting the most common practice in Shilong in spite of the fact that Cherapunjee and Mawsynram are situated only at a distance of 55 kilometers from there? Explain.
- **Ans.** a. Shillong receives heavy rainfall during monsoon period but the state faces acute water shortage.

- b. Once chirrapunji was famous because it received the highest rainfall in world. Today this
 area faces an acute water shortage. This is a consequence of extensive deforestation and
 no efforts toward rainwater harvesting
- c. It is mainly due to lack of water storage system.
- d. Nearly every household in the city has a rooftop rain water harvesting structure.
- e. Nearly 15-25 percent of the total water requirement of the household comes from roof top water harvesting.

18. Why is the need for water increasing day by day? Explain three reasons.

- **Ans.** a. Population is increasing day by day. A large population means more water is required not only for domestic purpose but for agricultural purpose.
- b. Industries are the heavy users of fresh water for power which put tremendous pressure on water resources.
- c. In cities or housing colonies, they have their own groundwater pumping devices to meet their needs resulting in over exploitation of water resources.

19. What is the importance of water as a natural resource?

Ans. a. It is essential for life.

- b. It is essential for domestic consumption.
- c. Agriculture is possible only due to water.
- d. In is a source of hydraulic energy.
 Indispensable for disposal of sewage

20. Suggest some ways to conserve water resources.

Ans. a. Creation of more water storage.

- b. Awareness should be spread about reasons of water scarcity.
- c. Development of rainwater harvesting techniques and watershed developments.
- d. Over irrigation should be stopped.
- e. Setting up of more and more recycling of water plants.

21. How do the dams create conflicts between the people?

- **Ans.** a. The dams have created conflicts between people wanting different uses and benefits from the same water resources.
- b. Inter-state water disputes are becoming common with regard to sharing the costs and benefits of the projects.

c. The landowners, the rich farmers. Industrialists and urban centers are benefitting at the cost of local communities.

22. "Multipurpose projects have failed to achieve the purpose for which they were built". Justify by giving reasons.

- **Ans.** a. These dams were constructed to control floods but sometimes they are unable to control floods.
- b. Regulating and damming of rivers affect the natural flow of rivers causing poor sediment flow and excessive sedimentation at the bottom of the reservoir.
- c. Dams also create conflict between the states and people, wanting different uses and benefits from the same water resources.

23. Why is groundwater a highly overused resource?

- **Ans.** a. Farmers dependent on groundwater to raise their crops.
- b. Maximum people of the world are dependent on groundwater for drinking purpose and other house hold purpose because according to them this water is fresh and clean.
- c. Due to urbanization and industrialization maximum groundwater is used.

24. Why are multipurpose projects called as the temples of modern world?

Ans. Jawaharlal Nehru proudly proclaimed the dams as the 'Temples of the modern India' due to the following reasons:

- a. It would integrate development of agriculture and the village economy with rapid industrialization and growth of the urban economy.
- b. They not only help in irrigation but also help in electricity generation, water supply for domestic and industrial uses, flood control, recreation, inland navigation and fish breeding.

25. Why is the scarcity of water increasing day by day in India?

Ans. a. Rapid growth of population.

- b. Rising area under agriculture and rise in the demand of food and cash crops.
- c. Water resources are being exploited to expand irrigated areas in dry seasons. Due to industrialization

26. Why should we conserve and manage our water resources?

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

27. How can we control over exploitation and mismanagement of water resources?

- **Ans.** a. Conservation and management of water resources is a combined effort-each one of us contributing towards it positively.
- b. Multipurpose river projects should be created by the government to stop the flowing water.
- c. Awareness should be spread among the people regarding water management and conservation.

28. State any three points that should be kept in mind before the construction of Dams?

- **Ans.** a. While the construction of dams environment issues, displacement of people should be keep in mind.
- b. Distribution of water in between the states should be judicial, while constructing dams.
- c. More benefits of dams should be given to the local people whose life gets affected due to the construction of dam.

29. Why is there a need to conserve and manage our water resources?

- **Ans.** a. Because water is essential for life, that's why there is need to conserve water resources.
- b. To ensure food security, that's why there is need to conserve water resources.
- c. For continuation of our livelihood and productive activities, that's why there is need to conserve water resources.
- d. To safeguard ourselves from health hazard that's why there is need to conserve water resources.