

NCERT QUESTIONS WITH SOLUTIONS

1. Multiple choice questions.

(i) Based on the information given below classify each of the situations as 'suffering from water scarcity' or 'not suffering from water scarcity'.

(1) Region with high annual rainfall.

(2) Region having high annual rainfall and large population.

(3) Region having high annual rainfall but water is highly polluted.

(4) Region having low rainfall and low population.

Ans. Suffering from water scarcity- (3), (4);
Not suffering from water scarcity-(1), (2)

(ii) Which one of the following statements is not an argument in favour of multipurpose river projects?

(1) Multi-purpose projects bring water to those areas which suffer from water scarcity.

(2) Multi-purpose projects by regulating water flow helps to control floods.

(3) Multi-purpose projects lead to large scale displacements and loss of livelihood.

(4) Multi-purpose projects generate electricity for our industries and our homes.

Ans. (3) Multi-purpose projects lead to large scale displacements and loss of livelihood

2. Here are some false statements. Identify the mistakes and rewrite them correctly.

(i) Multiplying urban centres with large and dense populations and urban lifestyles have helped in proper utilisation of water resources.

Ans. Multiplying urban centres with large and dense populations and urban lifestyles have resulted in overexploitation of water resources.

(ii) Regulating and damming of rivers does not affect the river's natural flow and its sediment flow.

Ans. Regulating and damming of rivers affect the river's natural flow and its sediment flow.

(iii) In Gujarat, the Sabarmati basin farmers were not agitated when higher priority was given to water supply in urban areas, particularly during droughts.

Ans. In Gujarat, the Sabarmati basin farmers were agitated when higher priority was given to water supply in urban areas, particularly during droughts.

(iv) Today in Rajasthan, the practice of rooftop rainwater harvesting has gained popularity despite high water availability due to the Rajasthan Canal.

Ans. Today in Rajasthan, the practice of rooftop rainwater harvesting has declined in popularity because of high water availability due to the Rajasthan Canal.

3. Explain how water becomes a renewable resource.

Ans. Water keeps on circulating in nature through various states of matter; in the form of liquid water, vapour and ice.

Due to this, the water which disappears because of evaporation comes back in the form of rains. Thus, water becomes a renewable resource.

4. What is water scarcity and what are its main causes?

Ans. Shortage of water for a sustained period is called water scarcity. Growing population, overexploitation and unequal distribution of water among social groups are the main causes of water scarcity.

5. Compare the advantages and disadvantages of multi-purpose river projects.

Ans. Advantages of multi-purpose projects: They help in flood control. They help in supplying water to water deficient area. They help in better supply of drinking water. They also help in electricity generation.

Disadvantages of multi-purpose projects: Construction of a large dam results in large scale displacement of people. It affects the livelihood of the

displaced. Vast tracts of land is inundated in the catchment area which leads to large scale environmental consequences.

6. Discuss how rainwater harvesting in semi-arid regions of Rajasthan is carried out.

Ans. In Rajasthan, people traditionally built tankas in the basements. Rainwater from rooftop was collected in the tankas. The water was stored so that it could be used during lean seasons. At some places, baolis were made to store rainwater.

7. Describe how modern adaptations of traditional rainwater harvesting methods are being carried out to conserve and store water.

Ans. In modern homes rooftop rainwater is becoming more popular. Drains from rooftop are channelized to underground tank. The water is filtered and purified and then stored for later use. The water thus collected can also be channelized to recharge groundwater.