

CLASS - 10

SOCIAL SCIENCE

Contemporary India-II

CH-3 : Water Resources

Part - 5

Exercise

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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
- A Region with high annual rainfall. NS
- B Region having high annual rainfall and large population. S
- C Region having high annual rainfall but water is highly polluted. S
- D Region having low rainfall and low population. NS



1

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

A

Multi-purpose projects bring water to those areas which suffer from water scarcity. ✓

B

Multi-purpose projects by regulating water flow helps to control floods. ✓

C

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

D

Multi-purpose projects generate electricity for our industries and our homes. ✓



(iii) Here are some false statements.
Identify the mistakes and rewrite them correctly.

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



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

Answer :

The increasing number of cities, their size and density of population and urban lifestyle are leading to **overexploitation** of water resources.



1

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





1

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

Answer :

Building dams on rivers and controlling them obstructs their natural flow, which reduces sediment flow.



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



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Answer :

Today in Rajasthan, the practice of rooftop rainwater harvesting is on the decline due to the Rajasthan canal.



2

Answer the following questions in about 30 words.

- (i) Explain how water becomes a renewable resource.

mg



Answer the following questions in about 30 words.

2

(i) Explain how water becomes a renewable resource.

Answer:

- ▮ We get water from surface runoff and groundwater sources.
- ▮ Water is constantly renewed and recharged naturally through the hydrologic cycle.
- ▮ All water remains in motion in the water cycle, which ensures water renewal.



2

(ii) What is water scarcity and what are its main causes?



2 | (ii) What is water scarcity and what are its main causes?

Answer :

Lack of water to fulfill basic needs is called **water scarcity**.

The main reasons for this are-

- Excessive and ever-increasing population
- Overuse of available water
- Water pollution
- Uneven distribution of water in society



2

(iii) Compare the advantages and disadvantages of multi-purpose river projects.



2

(iii) Compare the advantages and disadvantages of multi-purpose river projects.

Answer :

Advantages of multipurpose projects –

- ▣ There is an increase in electricity production.
- ▣ It is helpful in flood control.
- ▣ It is helpful in fish farming.
- ▣ It promotes tourism.



Disadvantages of multipurpose projects –

- ▣ The flow of rivers is disrupted.
As a result, local flora and fauna are harmed.
- ▣ Local people lose their land, livelihood and resources.
- ▣ Water pollution occurs due to stagnant water in the reservoirs of dams.



Answer the following questions in about 120 words.

3

- (i) Discuss how rainwater harvesting in semi-arid regions of Rajasthan is carried out.

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Answer the following questions in about 120 words.

3

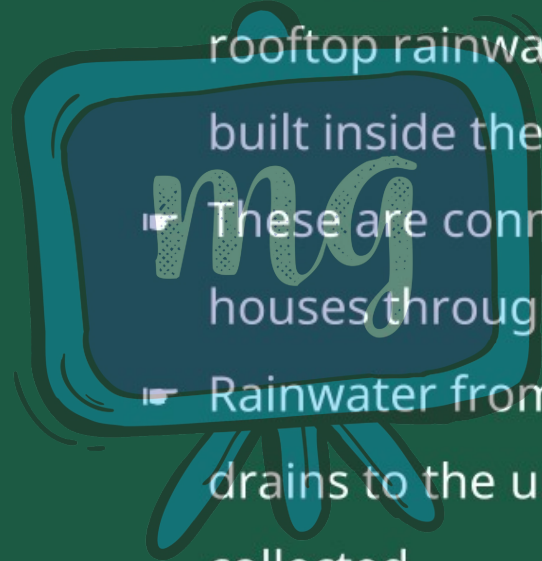
(i) Discuss how rainwater harvesting in semi-arid regions of Rajasthan is carried out.

Answer :

- In the semi-arid areas of Rajasthan (Bikaner, Phalodi, Barmer etc.), underground tanks or tanks are used to collect drinking water.

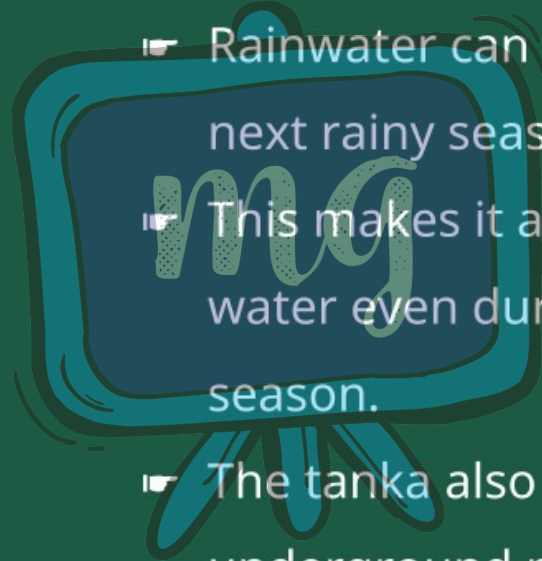


- Tanka is an integral part of a well-developed rooftop rainwater harvesting system, which is built inside the main house or courtyard.
- These are connected to the sloping roofs of the houses through pipes.
- Rainwater from the roof flows through these drains to the underground tank where it is collected.
- The first rainwater is used to clean the roofs and drains and is not collected.





- After this, the rain water that falls is collected.
- Rainwater can be stored in the tank until the next rainy season.
- This makes it a water source providing drinking water even during the water-scarce summer season.
- The tanka also helps in keeping the underground rooms cool, providing relief from the heat during summer.





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



3

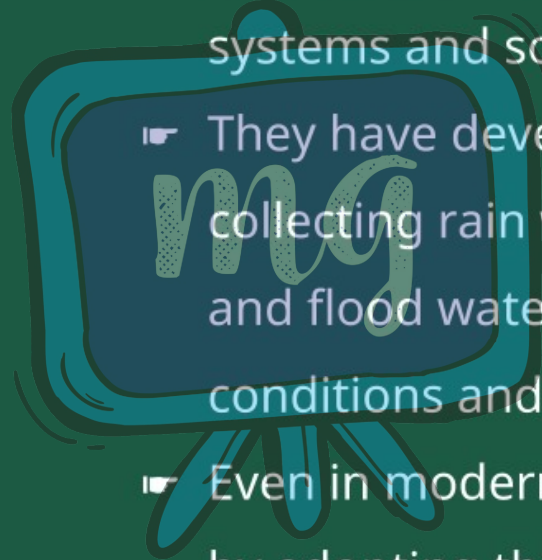
(ii) Describe how modern adaptations of traditional rainwater harvesting methods are being carried out to conserve and store water.

Answer :

- ▣ Rainwater harvesting is a method of collecting rainwater for drinking purposes.
- ▣ Excellent water storage structures were found in ancient India.

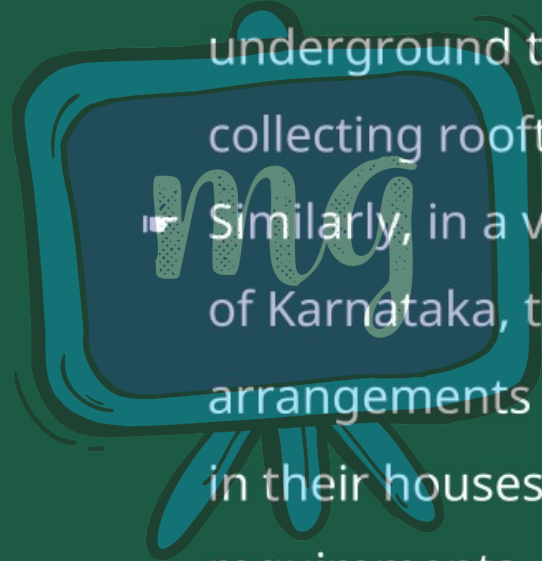


- ▮ People had deep knowledge about rainfall systems and soil properties.
- ▮ They have developed many methods of collecting rain water, ground water, river water and flood water as per the local ecological conditions and their water requirements.
- ▮ Even in modern times, water is being conserved by adopting these traditional methods in many states of India.





- For example, in many houses of Rajasthan, underground tanks are constructed for collecting rooftop rainwater.
- Similarly, in a village located in Mysore district of Karnataka, the villagers have made arrangements for rooftop rainwater harvesting in their houses to meet their water requirements.





- Tamil Nadu is the only state in the country where it has been made mandatory to have rooftop rainwater harvesting structures in every house across the state.
- In highly populated cities (where there is shortage of potable water), water scarcity can be reduced by adopting this method.

