Class X - Social Science

Contemporary India

Water Resources

CBSE NOTES

Water Resources - Mastery Worksheet

Strengthen your foundation with key concepts and basic applications.

Mastery Questions

edzy

Solve the following questions. Write your answers in the space provided.

1. Explain the hydrological cycle and its significance in making water a renewable resource.

Hint: Think about the processes involved in the water cycle and how they contribute to water renewal.

2. Discuss the causes of water scarcity in regions with high annual rainfall.

Hint: Consider human activities and management practices that affect water availability.

Solve the following questions. Write your answers in the space provided.

3. Compare the traditional and modern methods of water conservation in India.

Hint: List the features of both traditional and modern methods before comparing.

4. Analyze the socio-economic and environmental impacts of multi-purpose river projects.

Hint: Consider both positive and negative impacts on society and the environment.

Solve the following questions. Write your answers in the space provided.

5. Describe the rooftop rainwater harvesting system in Rajasthan and its importance.

Hint: Focus on the process and benefits of the system in a water-scarce region.

6. Explain how industrialisation and urbanisation have aggravated water scarcity in India.

Hint: Think about the increased demand and pollution caused by industrial and urban growth.

Mastery Questions

Solve the following questions. Write your answers in the space provided.

7. Discuss the role of dams in flood control and their limitations.

Hint: Consider both the intended function and the challenges faced by dams.

8. Evaluate the effectiveness of the Jal Jeevan Mission in addressing water scarcity in rural India.

Hint: Assess the mission's objectives and its real-world implementation.

Mastery Questions

Solve the following questions. Write your answers in the space provided.

9. Compare the water conservation practices in Rajasthan and Meghalaya.

Hint: Highlight the adaptation to local environments in both regions.

10. Propose a strategy for sustainable water management in urban areas.

Hint: Think about combining technology, policy, and community involvement.

Answers

Check your answers with the solutions below.

1. Explain the hydrological cycle and its significance in making water a renewable resource.

Solution: The hydrological cycle is the continuous movement of water on, above, and below the surface of the Earth. It involves processes like evaporation, condensation, precipitation, and runoff. This cycle ensures that water is constantly renewed and replenished, making it a renewable resource. The cycle is crucial for maintaining the balance of water in different reservoirs like oceans, atmosphere, and land.

2. Discuss the causes of water scarcity in regions with high annual rainfall.

Solution: Water scarcity in regions with high annual rainfall can be attributed to factors like over-exploitation of water resources, pollution of freshwater sources, and unequal distribution of water among different social groups. Additionally, inefficient water management practices and lack of proper infrastructure to store and distribute rainwater contribute to scarcity despite high rainfall.

3. Compare the traditional and modern methods of water conservation in India.

Solution: Traditional methods include rooftop rainwater harvesting, building tanks like 'tankas' in Rajasthan, and diversion channels like 'guls' in the Himalayas. Modern methods involve multi-purpose river projects like dams and canals, and government initiatives like the Jal Jeevan Mission. While traditional methods are eco-friendly and locally adapted, modern methods provide large-scale solutions but may have environmental impacts.

4. Analyze the socio-economic and environmental impacts of multi-purpose river projects.

Solution: Multi-purpose river projects provide benefits like irrigation, electricity generation, and flood control, contributing to socio-economic development. However, they can lead to environmental issues like sedimentation, habitat destruction, and waterlogging. Socially, they may cause displacement of communities and conflicts over water sharing.

Check your answers with the solutions below.

5. Describe the rooftop rainwater harvesting system in Rajasthan and its importance.

Solution: In Rajasthan, rooftop rainwater harvesting involves collecting rainwater from rooftops and storing it in underground 'tankas'. This system is crucial in arid regions for providing a reliable source of drinking water, especially during dry seasons. It also helps in groundwater recharge and reduces dependence on external water sources.

6. Explain how industrialisation and urbanisation have aggravated water scarcity in India.

Solution: Industrialisation and urbanisation have increased water demand for domestic and industrial use, leading to over-exploitation of water resources. Pollution from industries has contaminated freshwater sources, reducing usable water. Urban areas often lack efficient water management systems, exacerbating scarcity.

7. Discuss the role of dams in flood control and their limitations.

Solution: Dams regulate river flow, storing excess water during heavy rainfall and releasing it gradually, thus controlling floods. However, their effectiveness is limited by sedimentation, which reduces storage capacity, and mismanagement, which can lead to sudden water releases causing floods downstream.

8. Evaluate the effectiveness of the Jal Jeevan Mission in addressing water scarcity in rural India.

Solution: The Jal Jeevan Mission aims to provide piped water supply to every rural household, ensuring access to safe drinking water. It focuses on sustainable water management and community participation. While it has improved water accessibility, challenges like implementation delays and maintenance issues remain.

Check your answers with the solutions below.

9. Compare the water conservation practices in Rajasthan and Meghalaya.

Solution: In Rajasthan, traditional practices like 'tankas' and 'khadins' are used to store rainwater in arid conditions. In Meghalaya, bamboo drip irrigation systems efficiently channel water from streams to fields in hilly terrain. Both methods are adapted to local ecological conditions but differ in technology and application.

10. Propose a strategy for sustainable water management in urban areas.

Solution: A sustainable strategy includes promoting rainwater harvesting, recycling wastewater, and implementing efficient water distribution systems. Public awareness campaigns and strict regulations on water use and pollution can also help. Integrating traditional and modern methods can ensure long-term water sustainability.

Study smart, not hard - with Edzy!

For Students

- Practice past papers to get exam-ready
- Study with a timer to stay focused
- Revise regularly to build long-term memory

For Teachers

- Use Edzy to share quizzes instantly with students
- Save time with ready-made teaching aids
- Simplify test prep with structured resources

> **Before You Sleep:**
> Quickly review important notes - it helps memory consolidation.

edzy

Personal AI Tutor for CBSE Classes 6-12 & NCERT Help

edzy is a personal AI tutor for CBSE and State Board students, with curriculum-aligned guidance, practice, revision, and study plans that adapt to each learner.