

### Lesson 3 Water Resources

#### Key Concepts of the lesson -

#### **WATER SCARCITY AND THE NEED FOR WATER CONSERVATION AND MANAGEMENT**

Roof top rainwater harvesting, objectives of Rainwater harvesting, Meaning of multipurpose

river valley project, Causes of social movements for some dams, Bamboo drip Irrigation System, Khadins & Johads, Guls & Kuls, major sources of irrigation in India, Conserve of water resources.

**Locating and Labeling** ; Dams: (1) Salal; (2) Bhakra Nangal; (3) Tehri; (4) Rana Pratap Sagar; (5) Sardar Sarovar; (6) Hirakud; (7) Nagarjuna Sagar and (8) Tungabhadra.

#### **MCQ**

**Q.1 The total volume of the world's water is estimated to exist as ocean:**

- (a) 75.5% (b) 85.5%
- (c) 95.5% (d) 65.5%

**Q.2 Roof top rainwater harvesting is the most common practice in-**

- (a) Shillong (b) Guwahati
- (c) Imphal (d) Patna

**Q.3 On which river has Nagarjun Sagar Dam been constructed?**

- (a) River Coyana (b) River Krishna
- (c) River Godavari (d) river Tapi

**Q.4 How much % of the Earth's Surface is covered with water?**

- (a) About 70% (b) About 90%
- (c) About 60% (d) None of these

**Q.5 What is the rank of India in the world countries in the terms of Water availability per person p.a.?**

- (a) 129<sup>th</sup> (b) 130<sup>th</sup>
- (c) 131<sup>st</sup> (d) 133<sup>rd</sup>

**Q.6 It is predicated that nearly 2 billion people will live in absolute water scarcity in the year of –**

- (a) 2015 (b) 2020
- (c) 2025 (d) 2030

**Q.7 The first & the only state in India which has made Roof Top Rain water Harvesting Structured compulsory to all the across the state is –**

- (a) Karnataka (b) Tamil Nadu
- (c) Kerala (d) none of these

#### **SHORT ANSWER QUESTIONS**

**Q.1 State any three objectives of Rainwater harvesting?**

Ans: (a) To reduce run off water  
(b) To raise the water table  
(c) To reduce ground water pollution

**Q.2 What is multipurpose river valley project? State any two purposes which are fulfilled by a river valley project?**

Ans: Multipurpose river valley project consists a dam or series of dams on a river or rivers for fulfill many purposes like:

- (a) irrigation
- (b) electricity
- (c) control flood
- (d) check soil erosion
- (e) inland navigation
- (f) fisheries etc.

**Q.3 Mention three major sources of irrigation in India, which source of irrigation is more popular in southern**

state? and Why?

Ans : (I) The three major sources of irrigation in India are –

- (a) Canals
- (b) Wells & tube wells
- (c) Tanks

(II) Tank irrigation

(III) Because Southern States are mostly come under Deccan plateau which are not suitable for irrigation by canals

**Q.4 What is “Water scarcity” what are its main causes?**

Ans: “Water scarcity” means shortage of water.

CAUSES: (may write any two)

- (a) Unequal distribution of rainfall
- (b) Large & growing population
- (c) Over exploitation of water
- (d) Wastage of water by people (Explain all in brief)

**Q.5 Name any two multipurpose river valley projects or dams which are causes of new social movements.**

**Why did people oppose them?**

Ans : Two Multipurpose project which are caused social movements –

- (a) Narmada –Bachao Andolan
- (b) Tehri-Dam Andolan
- (c) Sardar Sarover Dam
- Large scale displacement of local communities
- Environment issues
- Demand for Rehabilitation facilities from Govt.

**Q.6 Explain in brief –**

- (a) Bamboo drip Irrigation System
- (b) Khadins & Johads
- (c) Guls & Kuls

Ans:

- (1) In Meghalaya, 200 years old system of tapping stream and spring water by using Bamboo –pipes.
- (2) People built division channels from rivers for irrigation to their field in western Himalaya is called Guls or kuls .
- (3) People developed inundation channels to irrigate their fields were converted into rain storage structure in particularly western Rajasthan Jaisalmer called Khadins and Johads in other parts of its state.

**Q.7. Why do we conserve water resources?**

- Ans: i) To safeguard ours from health hazards  
 ii) To ensure food scarcity  
 iii) To protect natural ecosystem (Explain all in brief)

### LONG ANSWER TYPE QUESTIONS

**Q.1 How can rainwater be harvested? Explain. (Four points)**

Ans : Rainwater can be harvested in the following ways :(any four points)

- i) By digging ponds and tanks.
- ii) By building embankments and check dams.
- iii) By making arrangements for storage of rainwater on rooftops.
- iv) By constructing concrete underground reservoirs.
- v) By constructing reservoirs in park and public places and covering them with concrete slabs.
- vi) Building plans should invariably be made only when there is a provision for water harvesting.

**Q.2 What is the different causes of water pollution? Explain by four reasons.**

Ans: The different causes of water pollution are:

- (a) Mix-up of domestic wastes
- (b) Mix-up of Industrial wastes,
- (c) Use of Chemicals, pesticides and fertilizers used in agriculture
- (d) Oil slicking by ships in oceans (Explain all in brief)

**Q.3 Match the following**

Column A	Column B
1. Social movement	a) highest rainfall in the world

- |  |   |
|--|---|
| 2. A dam                                     | b) temples of modern India                                |
| 3. Jawaharlal Nehru declared the dams as the | c) a barrier across flowing water that obstructs the flow |
| 4. Mawsynram                                 | d) Narmada Bachao Andolan.                                |

**Answer key of MCQ**

Ans. 1. (c)      2. (a)      3. (b)      4. (a)      5. ( d )      6( c )      7. ( b)

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