CBSE Test Paper - 03

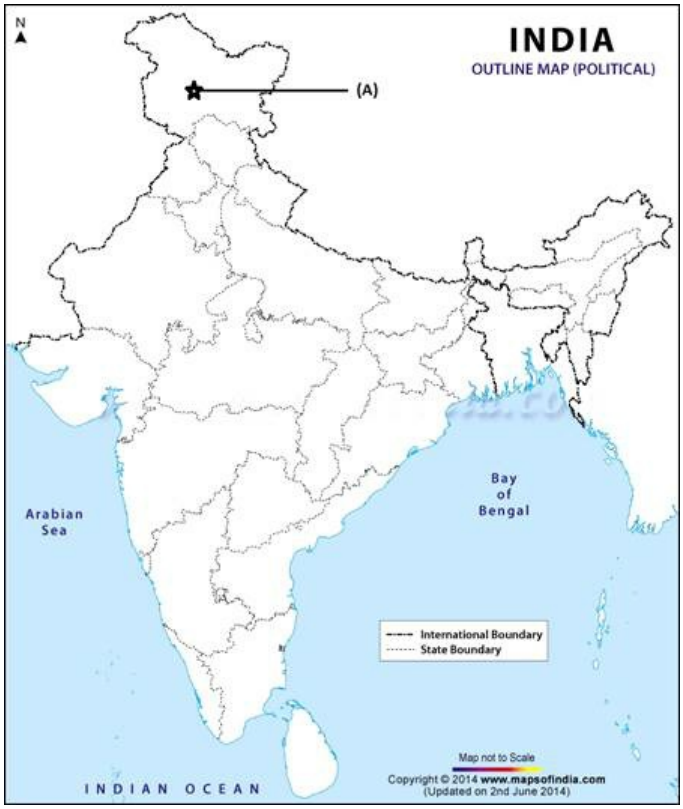
Chapter - 11 Water Resources

1. Iltutmish constructed a water tank in Hauz Khas, Delhi in the 14^{th} Century to supply water to _____ **(1)**
   a. red fort
   b. Hawa mahal
   c. siri fort
   d. Tajmahal
2. Fresh water on the surface is recharged through a process called _____ **(1)**
   a. rivers
   b. humidity
   c. precipitation
   d. hydrological cycle
3. Jawaharlal Nehru proudly proclaimed the dams as the **(1)**
   a. wealth of India
   b. temples of modern India
   c. proud of India
   d. gates of India
4. Roof top rain water harvesting is the most common practice in **(1)**
   a. Shillong, Meghalaya
   b. Pune, Maharashtra
   c. Bangalore, Karnataka
   d. Lucknow, Uttar Pradesh
5. The reservoirs that are created on the floodplains also submerge_____. **(1)**
   a. lakes and ponds
   b. Tribal areas in Narmada valley.
   c. the existing vegetation
   d. plain regions and its wild life
6. Name the village in Karnataka which has earned a rare distinction of being rich in rainwater. **(1)**
7. Name the hydraulic structure that was constructed by Iltutmish in the 14th century for

supplying water to the Siri Fort area. **(1)**

8. Why has bamboo drip irrigation system been installed in Meghalaya? **(1)**
9. Name the oldest water harvesting system channeling the flood water of river Ganga. **(1)**
10. Describe any three traditional methods of rainwater harvesting adopted in different parts of India. **(3)**
11. Gujarat and Maharashtra have many river water dams and reservoirs but these states were flooded extensively in 2006. What was the reason? **(3)**
12. Give three reasons for water scarcity in post-independence India. **(3)**
13. i. A feature is shown by an alphabet A on the given political map of India. Identify and write the correct name of this feature on the line drawn on the map as per the given hint. **(3)**
    a. A Dam

    ii. on the same map of India locate and label the following items with appropriate symbols:
    a. A Dam on River Narmada
    b. A Dam on River Tungabhadra



14. Discuss how rainwater harvesting in semi-arid regions of Rajasthan is carried out. **(5)**
15. Why is roof top water harvesting important in Rajasthan? Explain. **(5)**

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Answers

1. c. siri fort
   Explanation: Iltutmish constructed a water tank in hauz Khas ,Delhi in the 14th Century to supply water to siri fort.
2. d. hydrological cycle
   Explanation: This freshwater is mainly obtained from surface run off and ground water that is continually being renewed and recharged through the hydrological cycle. This water cycle as it is otherwise called, includes evaporation, condensation and precipitation.
3. b. temples of modern India
   Explanation: Jawaharlal Nehru proudly proclaimed the dams as the 'temples of modern India'; the reason being that it would integrate development of agriculture and the village economy with rapid industrialisation and growth of the urban economy.
4. a. Shillong, Meghalaya
   Explanation: Roof top rain water harvesting is the most common practice in Shillong, Meghalaya. It is interesting because Cherapunjee and Mawsynram situated at a distance of 55 km.
5. c. the existing vegetation.
   Explanation: The reservoirs that are created on the floodplains also submerge the existing vegetation and soil leading to its decomposition over a period of time.
6. Gendathur a remote backward village in Mysuru, Karnataka.
7. In the 14th Century, the tank in Hauz Khas, Delhi was constructed by Iltutmish for supplying water to Siri Fort area.
8. It has been installed to tap spring and stream water by using bamboo pipes. Bamboo pipes are used to divert perennial springs on the hilltops to the lower reaches by

gravity.

9. Sringaverapura near Allahabad the oldest water harvesting system channeling the flood water of river Ganga.

10. i. In hilly and mountainous regions, people build diversion channels like 'gul' or 'kul' in Western Himalaya for agriculture.
    ii. Rainwater harvesting is a technology used to collect, convey and store rain for later use from relatively clean surfaces such as a roof, land surface or rock catchment. Roof-top rainwater harvesting was commonly practised to store drinking water, particularly in Rajasthan and Gujarat.
    iii. In West Bengal, people develop inundation channels to irrigate their fields
    iv. In semi-arid regions, agricultural fields are converted into rainfed storage structures that allow the water to stand and moisten the soil like the ‘khadins’ in Jaisalmer and ‘Johads’ in other parts of Rajasthan.

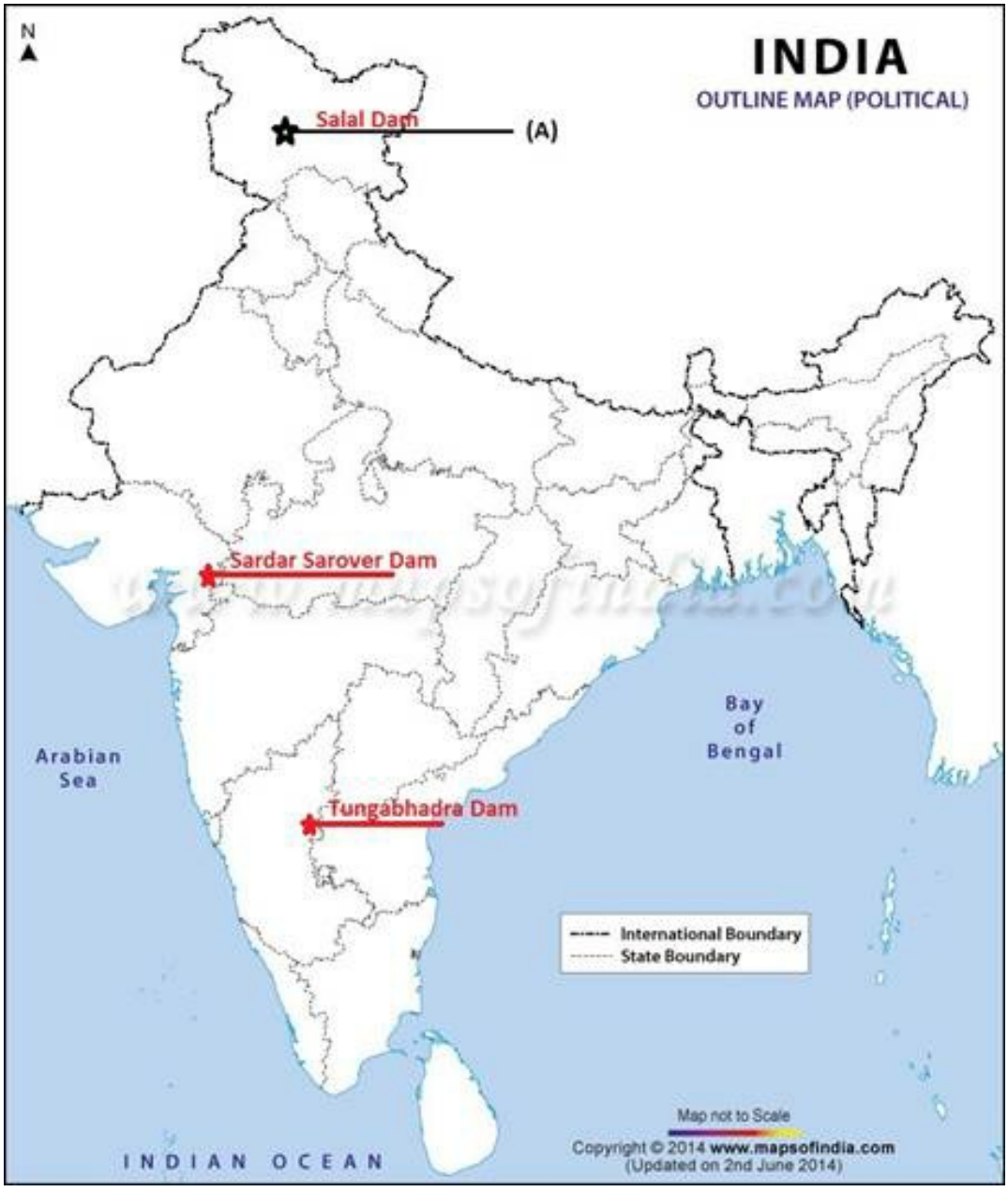
11. The main reasons behind this incident are:

    i. These floods were caused by the heaviest ever recorded 24 hours of rainfall.
    ii. Reservoirs obstruct the river sediments to free flow and these subside on the floor of the reservoir and raise the water level consequently.
    iii. When heavy rainfall occurs, the dams aggravate the flood situation by opening water gates to avoid breaching the embankment. Such a situation happened in Gujarat and Maharashtra in 2006.

12. Three reasons for water scarcity in India are:

    i. Post-independence India has witnessed intensive industrialization and urbanization which increased water demand.
    ii. Large urban centres with large and dense population and urban lifestyles have only added to water requirement. The problem has been compounded with increased concretization due to urban development that has choked groundwater resources. Water is neither being recharged nor stored in ways that optimize its use while retaining the natural ingredients of water.
    iii. Population explosion after independence led to over-exploitation of underground water for irrigation. India is among the top growers of agricultural produce in the

world and therefore the consumption of water for irrigation is amongst the highest. Traditional techniques of irrigation cause maximum water loss due to evaporation, drainage, percolation, water conveyance and excess use of groundwater.

13. 

14. Rainwater harvesting in the semi-arid regions of Rajasthan is carried out in the following way:

    i. Rooftop rain water harvesting is commonly practiced to store water.
    ii. In arid and semi- arid regions, agricultural fields were converted into rain-fed storage structures that allowed the water to stand and moisten the soil like the

'khadins' in Jaisalmer and 'Johads' in other parts of Rajasthan.

iii. In the semi-arid and arid regions of Rajasthan, particularly in Bikaner, Phalodi and Barmer, almost all the houses traditionally had underground tanks or tankas for storing water.

iv. In western Rajasthan, the practice of rooftop rainwater harvesting is on the decline as plenty of water is available due to the perennial Rajasthan Canal, though some houses still maintain the tankas since they do not like the taste of tap water.

15. Roof top water harvesting is important in Rajasthan because of the following reasons:

i. In Rajasthan, the temperature is very high and evaporation is also high. moreover, it is a desert region and rainfall is very low. so the residents of Rajasthan came up with rooftop rainwater harvesting. rainwater is collected by using pipes from slanting roofs.

ii. There is a lack of perennial rivers in Rajasthan.

iii. The rainfall is not reliable in this region.

iv. It was commonly practised to store drinking water.

v. The rainwater can be stored in the tanks till the next rainfall, making it an extremely reliable source of drinking water when all other sources are dried up, particularly in the summers.

vi. Rainwater, or palar pani, as commonly referred to in these parts, is considered the purest form of natural water.

vii. Many houses construct underground rooms adjoining the 'tanka' to beat the summer heat as it would keep the room cool.

viii. Some houses still maintain the tanks since they do not like the taste of tap water.

ix. These were constructed to meet the growing water demands in the area.