

1. Which one of the following would contain water with the maximum amount of turbidity?

- (a) Lakes
- (b) Oceans
- (c) Rivers
- (d) Wells

2. Match List-I (Soil classification of an aquifer) with List-II (Values of the range of hydraulic conductivities in meter per day)

List - I	List - II
A. Fine gravel	1. 1 to 10
B. Very fine sand	2. 0.1 to 0.01
C. Silt	3. 100 to 1000
D. Pure clay	4. 10^{-5} to 10^{-10}

Codes :

- a. A - 1, B - 3, C - 4, D - 2
- b. A - 1, B - 3, C - 2, D - 4
- c. A - 3, B - 1, C - 4, D - 2
- d. A - 3, B - 1, C - 2, D - 4

3. Which of the following statements about Design Period are true?

- 1. It is concerned with economy of investments.
- 2. It takes into account aspects like life and durability and ease or difficulty of capacity increase of installations.
- 3. It considers the frequency of occurrence of extremes of river flow.
- 4. It is concerned with estimating future requirements.

Select the correct answer using the codes

given below:

- (a) 1, 2, 3 and 4
- (b) 2 and 3
- (c) 1, 2 and 4
- (d) 1, 3 and 4

4. Which of the following determinations are NOT necessary for raw water from a lake for use as source of supply of water for boiler-feed?

- 1. Turbidity
- 2. Bacterial count
- 3. Iron
- 4. Hardness

Select the correct answer using the codes

given below:

- (a) 1, 2 and 3
- (b) 1, 2 and 4
- (c) 1, 3 and 4
- (d) 2, 3 and 4

5. Consider the following statements: The daily per capita consumption of water apparently increases with

- 1. Higher standard of living of people
- 2. Availability of sewerage in the city.
- 3. Metered water supply.
- 4. Wholesome and potable quality of water.

Which of these statements are correct?

- (a) 1, 2 and 3
- (b) 2, 3 and 4
- (c) 1, 3 and 4
- (d) 1, 2 and 4

6. A commonly used handpump is the

- (a) Centrifugal pump
- (b) Reciprocating pump
- (c) Rotary pump
- (d) Axial flow pump

7. Match List-I (Industry and unit of production) with List-II (water need in kJ/unit/day) and select the correct answer:

List - I	List - II
A. Automobile (per vehicle)	1. 1 to 2
B. Leather (per 100 kg)	2. 4
C. Paper (per tonne)	3. 40
D. Crude petroleum refinery (per tonne)	4. 50 - 100
	5. 200 - 400

Codes :

- a. A - 3, B - 2, C - 5, D - 1
- b. A - 1, B - 3, C - 5, D - 4
- c. A - 3, B - 2, C - 4, D - 5
- d. A - 5, B - 4, C - 2, D - 1

8. Reciprocating pumps are suitable for

- (a) Low discharge and high head
- (b) High discharge and low head
- (c) Low discharge and low head
- (d) High discharge and high head

9. Which of the following statements are correct?

- 1. Groundwater is generally free from suspended and dissolved impurities
- 2. Suspended matters often contain pathogenic bacteria
- 3. Rain water is soft and tasteless
- 4. Lake water may contain microscopic organisms.

Select the correct answer using the codes given below:

- (a) 1, 2, 3 and 4
- (b) 1 and 2
- (c) 2, 3 and 4
- (d) 1, 3 and 4

10. Consider the following statements: While deciding to locate an intake structure for a city situated on a river bank, intake for water supply should be located

- 1. In deep waters
- 2. Sufficiently away from shore lines
- 3. Upstream of the populated city
- 4. Near navigational channel

Which of these are correct?

- (A) 1, 2 and 4
- (b) 1, 2 and 3
- (c) 2, 3 and 4
- (d) 1, 3 and 4

11. On which of the following factors, does the 17. population growth in a town normally depend?

- 1. Birth and death rates
- 2. Migrations
- 3. Probabilistic growth
- 4. Logistic growth

Select the correct answer using the codes given below:

- (a) 1 and 4
- (b) 1 and 2
- (c) 1, 2 and 3
- (d) 2 and 3

12. For water supply to a medium town, what is the daily variation factor?

- (a) 1.5
- (b) 2.5
- (c) 3
- (d) 3.5