

**841****April 2018**

*Time - Three hours*  
*(Maximum Marks: 75)*

*[N.B: (1) Q.No. 8 in PART - A and Q.No. 16 in PART - B are compulsory. Answer any FOUR questions from the remaining in each PART - A and PART - B*

*(2) Answer division (a) or division (b) of each question in PART - C.*

*(3) Each question carries 2 marks in PART - A, 3 marks in Part - B and 10 marks in PART - C.]*

PART - A

1. What do you mean by percapita demand? How will you arrive the value?
2. Write down the W.H.O. standards for any four impurities in drinking water.
3. What is pressure filter? Where is it used?
4. What are the advantages of pumping system of supplying water?
5. Define ecosystem.
6. Name the causes of deforestation.
7. Distinguish tsunami and cyclone.
8. Explain the terms acid rain and greenhouse effect.

PART - B

9. Explain any two methods of forecasting population.
10. Briefly explain the turbidity test of a water sample.
11. Write down the merits and demerits of intermittent system of supplying water.
12. Explain briefly the structure and function of an ecosystem.
13. Write short notes on classification of air pollutants.
14. What are the measures to be taken to conserve forest wealth?
15. Write short notes on earthquake mitigation.
16. Explain briefly the reverse osmosis processes.

[Turn over.....

PART - C

17. (a) Explain the different bacteriological tests for drinking water.

(Or)

- (b) From the given census data forecast the population in 2020, 2030 and 2040 by incremental increase method.

Year	1980	1990	2000	2010
Population	35800	38315	42740	44625

18. (a) What do you mean by disinfection of water? Explain the disinfection action by chlorine.

(Or)

- (b) Explain the different systems of supplying water.

19. (a) Explain briefly the grassland ecosystem, desert ecosystem and aquatic ecosystems.

(Or)

- (b) Explain in detail about conservation of biodiversity.

20. (a) Explain the effects of air pollution on human beings and materials.

(Or)

- (b) Explain in detail the effects and prevention of land pollution.

21. (a) Define the term disaster. Briefly explain the different types disaster.

(Or)

- (b) Explain in detail about the effects of cyclone and its management.

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