1250

April 2025

Time – Three hours
(Maximum Marks: 100)

[N.B.   1.   Answer all questions under Part-A. Each question carries 3 marks.

2.   Answer all the questions either (a) or (b) in Part-B. Each question carries 14 marks.]

PART – A

1.   Write the formulae used for calculating fire demand.

2.   Define intake.

3.   Why is disinfection necessary?

4.   What are the causes of water borne diseases?

5.   Compare continuous system with intermittent system.

6.   Write about radial system.

7.   What are the principles of sanitation?

8.   Write short note on lamp hole.

9.   List any three limitations of EIA.

10. Mention any three effects of air pollution on animals.

[Turn over.....

PART – B

11. (a) Estimate the population in 2011 by Arithmetical method, Geometrical method, Incremental increase method from the data as given in table.

Year	1941	1951	1961	1971	1981	1991	2001
Population	12000	16500	26000	41500	57000	68500	75000

(Or)

(b) Explain about river intake and canal intake with suitable sketches.

12. (a) What are the methods of chlorination? Explain about any four.

(Or)

(b) Explain about working of slow sand filter with neat sketch.

13. (a) Explain about dead end system and grid iron system with neat sketch.

(Or)

(b) Explain about map and drawing to be prepared for water supply scheme.

14. (a) Explain about street inlet, grease and oil trap with neat sketches.

(Or)

(b) Describe about laying and testing of sewer line.

15. (a) Explain about activated sludge process with neat sketch.

(Or)

(b) Draw the flow chart of methodology of EIA and explain.

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