F 3465 (Pages : 2) Reg. No.....

Name.....

B.TECH. DEGREE EXAMINATION, NOVEMBER 2014

Seventh Semester

Branch : Civil Engineering

ENVIRONMENTAL ENGINEERING—I (C)

(Old Scheme—Prior to 2010 Admissions)

[Supplementary/Mercy Chance]

Time : Three Hours Maximum : 100 Marks

Part A

Answer **all** *questions.*
Each question carries 4 *marks.*

1. What are the factors affecting percapita demand ?
2. Explain the methods available for population forecasting.
3. Write short note on pipe appurtenances in laying water supply mains.
4. What are the advantages and disadvantages of contrifugal pumps ?
5. Which are the different types of sewerage systems ?
6. State the physical characteristics of sewage and their testing.
7. Explain self purification of streams.
8. Write short note on deep manholes.
9. What are the different types of air pollutants ?
10. What are the different methods of disposal of refuse ?

(10 × 4 = 40 marks)

Part B

Answer **all** *questions.*
Each question carries 12 *marks.*

11. State the significance and features of Rural and Urban water supply systems.

Or

12. Mention the common impurities in water which should be taken into account in deciding the potability of a sample. Describe the essential tests to be performed on such a sample.
13. What is an 'intake structure' ? Enumerate the various types of intakes, and discuss in detail any two of them.

Or

Turn over

14. Explain briefly the general methods of distribution of water employed in municipal water supply schemes.

15. State the merits and demerits of (i) separate system of sewerage and (ii) combined system of severage.

Or

16. List out and explain the various physical, chemical and biological characteristics of sewage.

17. Mention the various methods of waste water disposal. Discuss their merits and demerits. Explain the conditions favourable for their adoption.

Or

18. Write detailed note on (i) Testing of sewers and (ii) ventilation of sewers.

19. List out the BIG SIX criteria air pollutants and explain their sources and effects.

Or

20. Explain the classification of composting technologies and discuss briefly the basic steps involved in the composting process.

(5 × 12 = 60 marks)