



C14-C-502

4619

BOARD DIPLOMA EXAMINATION, (C-14)
OCT/NOV—2018
DCE—FIFTH SEMESTER EXAMINATION
ENVIRONMENTAL ENGINEERING-I

Time : 3 hours]

[Total Marks : 80

PART—A

3×10=30

Instructions : (1) Answer **all** questions.

(2) Each question carries **three** marks.

(3) Answers should be brief and straight to the point and shall not exceed *five* simple sentences.

1. What is greenhouse effect?
2. List the methods of forecasting population.
3. What are objectives of water supply system?
4. Define the term aquifer and drawdown.
5. What are the intake works?
6. Expand E.D.T.A. By this test what can be determined in testing of water sample?
7. List out three objects of filtration.
8. Define disinfection of water.

* 9. List the water supply fittings in the buildings.

10. What is a sluice valve?

PART—B

10×5=50

Instructions : (1) Answer *any five* questions.

(2) Each question carries **ten** marks.

(3) The answers should be comprehensive and the criterion for valuation is the content but not the length of the answer.

11. Population of a town as obtained from the census reports are as follows:

Year	1951	1961	1971	1981	1991	2001	2011
Population	25101	28120	30500	45900	60210	80750	100850

Estimate the population in the year 2041 by arithmetical increase method and geometrical increase method.

12. Explain the infiltration gallery with a sketch.

13. Explain the reservoir intake with a neat sketch.

14. Explain the working of a rapid sand filter with a neat sketch.

15. What are the objectives treatments of water?

16. List any eight requirements of an efficient distribution system.

17. Explain the following with a sketch :

(a) Sluice valve

(b) Check valve

18. Explain different layouts of distribution systems in detail with sketches.
