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BOARD DIPLOMA EXAMINATION, (C-14)
OCTOBER/NOVEMBER-2018
DCE - FIFTH SEMESTER EXAMINATION

ENVIRONMENTAL ENGINEERING - I

Time : 3 Hours] [Total Marks: 80

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PART-A

3X10=30

Instructions   :   1. Answer **All** questions.
2. Each question carries **three** marks.
3. Answer should be brief and straight to the point and shall not exceed
   five simple sentences.

1. List the causes and effects of global warming.

2. State the need for protected water supply.

* 3. List any three methods of forecasting the population of a town and write the formula

   for any one method.

4. Define intake and classify different types of intakes.

5. Define (a) Aquifer   (b) Aquiclude and ground water table.

6. List the types of impurities present in water with an example.

7. Explain   (a) Grab sampling   (b) Composite sampling.

8. List any three points to be considered while collecting samples.

9. Classify distribution system.

10. List any 6 appurtenances in distribution system.

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10X5=50

Instructions **:**   1. Answer any **Five** questions.
                        2. Each question carries **ten** marks.
                        3. Answer should be comprehensive and the criterion for valuation is
                        the content but not the length of the answer

11. The census record of a city shown below:

Year	Population
1951	12100
1961	18600
1971	25200
1981	30300

Work out the probable population by Arithmetic, Geometric and incremental increase method in the year 2011.

12. State the merits and demerits of surface and ground sources for a water supply scheme of a town.

13. What are infiltration galleries? Explain with the help of neat sketches.

14. What are the points to be considered while collecting samples from

       (a) A surface sources.

       (b) A tap and

       (c) A pump fitted to a well.

15. Explain any two systems of distribution with sketches.

16. Compare   (a) Slow sand filters   (b) Rapid sand filters.

17. Explain different methods of water supply system with merits and demerits.

18. Draw neat sketches of water supply arrangements in a single stored building and name various components.

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