



C14-C-602

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**4711**

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

ENVIRONMENTAL ENGINEERING - II

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. Define the following terms (a) Sewage (b) Sewer (c) Sewerage
2. State any three objectives of sewerage.
3. List any six sewer appurtenances.
- \* 4. Draw the sketch of semi elliptical section & basket handle section of sewer.
5. State three reasons for ventilation of sewers.
6. List any six methods of sludge disposal.
7. Define B.O.D and C.O.D.
8. State any three aims of building drainage.
9. State any three advantages of bio gas plants.
10. List any three natural sources and three man made sources of air pollution.

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## PART-B

10X5=50

- Instructions* : \*  
1. Answer any **Five** questions, choosing at least one from each section.  
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. (a) Write six differences between “conservancy system” and “water carriage system” of sewage collection.  
(b) List four requirements of good surface drains.
12. Explain ordinary manhole with the help of a sketch.
13. (a) Write a short notes on (i) Equalization (ii) Proportioning (iii) Neutralization.  
(b) draw a schematic diagram of typical sewage treatment plant.
14. Design a septic tank for a hostel of 250 students with a water supply of 100 lpcd. Use detention period method. (Assume any data if required)
15. (a) Define following terms: (i) Soil pipe (ii) Waste pipe (iii) Vent pipe (iv) Anti-syphonage pipe.  
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(b) Explain briefly about floor trap and intercepting trap with the help of sketches.
16. Explain with sketches “one-pipe system” and ‘two-pipe system’ of plumbing.
17. Explain about bore hole latrine with the help of a sketch.
18. Draw the sketch of cyclone collector and explain the working.

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