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BOARD DIPLOMA EXAMINATION, (C-16) OCTOBER/NOVEMBER-2018 DCE-FOURTH SEMESTER EXAMINATION

ENVIRONMENTAL ENGINEERING-II

Time: 3 Hours] [Total Marks: 80

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 (a) Sewage (b) Garbage c) Sewerage.
- 2. List any six sewer appurtenances.
- 3. State the classification of shapes of sewers.
- 4. Draw the neat sketch a street inlet.
- 5. Define i) BOD ii) COD.
- 6. State any three objectives of treatment of sewage.
- 7. List any three demerits of uncontrolled dumping.
- 8. Define (a) soil pipe (b) Waste pipe (c) Anti syphonage pipe (ASP).
- 9. Write any three advantages of vermicompost.
- 10. State various types of rural latrines.

PART-B

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. (a) State any four objectives of sewerage works
 - (b) Write the differences between conservancy system and water carriage system of sewage collection in any six aspects.
- 12. What is a manhole explain ordinary manhole with the help of neat sketch.
- 13. With the help of sketch explain the construction working of a trickling filter.
- 14. Design a septic tank for a hostel of 200 students with a water supply of 100 lpcd. (used detention period method)..
- 15. (a) Draw the flow chart of activated sludge process.
 - (b) Write a short notes on (a) aerobic langoons (b) anaerobic langos.
- 16. What is compositing and Explain Bangalore and Indore methods of compositing in detail.
- 17. (a) State the requirement of good drainage system in buildings in any five aspects.
 - (b) With the help of a sketch explain single stack system.
- 18. Explain the working of Janatha model biogas plant with sketch.
