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(Pages : 2)

Name.....

Reg. No.....

**EIGHTH SEMESTER B.TECH. (ENGINEERING) DEGREE
[2014 SCHEME] EXAMINATION, APRIL 2018**

Civil Engineering

CE 14 801 – ENVIRONMENTAL ENGINEERING-II

Maximum : 100 Marks

Time : Three Hours

Part A

I. Answer any *eight* questions out of ten :

1. What is meant by Sullage? Compare it with sewage.
2. Define self Cleansing Velocity. What are the importance of it?
3. Explain about Oxidation Pond.
4. What is meant by Bulking of Sludge? How to overcome it?
5. Explain about sludge conditioning.
6. Explain the Conservancy System and Water carriage system.
7. Classify and explain the different types of Grit chamber.
8. Explain the Physical Characteristics of Solid waste.
9. Brief about Composting.
10. Explain about Health problems associated with Air pollution.

(8 × 5 = 40 marks)

Part B

II. Answer *all* questions :

11. Illustrate any *four* sewer appurtenances with neat diagram.

Or

12. Estimate the Sewage from town of population 2 lakhs with area of 5000 hectares. The area is divided into Buildings, Roads and Street, Parks and Lawns and open area of 60%, 20%, 15% and 5% respectively. Intensity of rainfall is 500 mm /day.
13. Explain the working principle Trickling Filter with neat diagram.

Or

14. Compare BOD and COD. Demonstrate the BOD test.

Turn over

15. (a) Explain the principles involved in sludge digestion.

(b) Explain the sludge dewatering facility.

Or

16. Explain the self purification of stream.

17. Explain about the construction and working principle Sanitary landfill.

Or

18. Explain in detail about the working principle of Electrostatic Precipitator with neat diagram.

(4 × 15 = 60 marks)