5242

Name:

Reg.No.

EIGHTH SEMESTER B.TECH DEGREE EXAMINATION, JUNE 2010

PT.CE/CE.04.803 – Environmental Engineering – II

Time: Three hours **Maximum: 100 marks**

(Answer all questions)

1. a. Discuss the consequences of green house effect.
   b. Explain briefly the solid waste disposal methods.
   c. What are the natural forms of air pollution?
   d. Explain the three distinct stages which occur in the process of sludge digestion.
   e. Explain the need for skimming tanks.
   f. Mention the principles of design of a manhole in serverline. Where is it located?
   g. What is oxygen sag curve in stream pollution? Explain in detail.
   h. Mention the physical properties of sewage.

(8x5=40 marks)

2. a. Discuss the system of sewerage used for sanitation and explain the merits and demerits of the system.

OR

   b. Explain the principle involved in the sewage purification of activated sludge process. Discuss the different methods of aeration.

3. a. Explain the physical, chemical and biological characteristics of waste water.

OR

   b. Describe the gaseous pollutants control techniques in detail.

4. a. Define sewage, sewer and sewerage. State the merits and demerits of -
      i). Separate system of sewerage
      ii). Combined system of sewerage.

OR

   b. Explain the test procedure for dissolved oxygen and derive the equation for first stage BOD formation.

5. a. Explain the particulate control technique in detail.

OR

   b. Describe the principles of operation of Standard Rate Trickling Filter.

(4x15=60 marks)

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