

(DCE 424 B)

B. Tech. DEGREE EXAMINATION, MAY - 2015

(Examination at the end of Final Year)

CIVIL ENGINEERING

Paper - IV : Advanced Environmental Engineering

Time : 3 Hours

Maximum Marks : 75

Answer question No. 1 compulsory

(15)

Answer any ONE question from each unit

(4 x 15 = 60)

- 1) a) State any two characteristics of the treatment plant effluents.
- b) Write any two impacts of air pollution?
- c) What is "Eutrophication"?
- d) What is symbiosis?
- e) When do you get a 'Looping plume'?
- f) What is importance of scrubbers?
- g) Define stream water and its preparation.
- h) What is principle of E.S.P?
- i) What is difference between music and noise?
- j) What are Aerosols?
- k) Define Dissolved Oxygen?
- l) Give the names of different type's of BOD.
- m) Explain the sanitation?

- n) What is “DALR”?
- o) State Streeter – Phelps’s formula?

Unit - I

- 2) a) Explain the self purification in a stream. [8]
- b) Briefly explain the effect of stream water pollutant’s on flora. [7]

OR

- 3) a) Write a short note the following : [8]
 - i) Oxidation ditch.
 - ii) Aerated lagoons.
 - iii) Stabilization pond’s
- b) Based on what principle, does an oxidation pond functions? [7]

Unit – II

- 4) a) With a neat flow diagram, explain the sources and characteristics of sugar mill wastes. [8]
- b) Differentiate between ‘EQUALIZATION’ and ‘NEUTRALIZATION’ citing suitable examples [7]

OR

- 5) a) With a neat flow diagram explain the sources and characteristics of pulp and paper industry. [8]
- b) Explain indetail about any one method of the treatment and disposal of dairy industry. [7]

Unit – III

- 6) a) Describe “Biological Nitrification”? [8]
- b) Explain the working of U tube aeration system. [7]

OR

- 7) a) State how plant’s are affected because of air pollutants? [8]
- b) Explain the effect’s of air pollution on [7]
 - i) Human health.
 - ii) Economic effect’s

Unit – IV

- 8) a) Write a short note on following : [8]
- i) Inertial separators.
 - ii) Fitters.
- b) Describe the function's of Bag filters? [7]
- OR
- 9) Distinguish between : [15]
- a) Fabric and fibrous fitters.
 - b) Single stage and two-stage precipitators.

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