(Pages: 2)

Name. Reg. No. 3 Enucation Reg

EIGHTH SEMESTER B.TECH. (ENGINEERING) DEGREE RXAMP APRIL 2017

CE 09 801—ENVIRONMENTAL ENGINEERING—II

(2009 Admissions)

Time: Three Hours

Maximum: 70 Marks

Part A

Answer all questions.

- 1. Define soil pipes.
- 2. What are leaping weirs?
- 3. What is the purpose of grit chamber?
- 4. When is vacuum filtration adopted?
- 5. Name few mechanism of particulate entred?

 $(5 \times 2 = 10 \text{ marks})$

Part B

Answer any four out of six.

- 1. Explain the meaning of the terms strong sewage, weak sewage, fresh sewage, state sewage and sewerage.
- 2. Write notes on : oxygen sage.
- 3. How does a grease trap differ from a skimming tank?
- 4. Define sludge. What are the varies factors controlling sludge digestion?
- 5. What are functions of a septic tank?
- 6. What do you understand by air pollution. State their causes.

 $(4 \times 5 = 20 \text{ marks})$

Part C

Answer according to choice:

- 1. (a) (i) How is the quantity of storm sewage from a town estimated while designing a drainage scheme for the same?
 - (ii) Explain the term time of concentration and its significance in design of storm sewers.

C 21409

- (b) Explain What requirements are generally considered necessary in economical planning and designing of drainage of buildings. Briefly state the prints to be kept in view while designing the prints to be of this pipe systems, the pipe sizes and their ruling gradients.
- 2. (a) What are the underlying objects in the methods of sewage treatment and disposal? Give an outline of this methods involved.

Or

2

- (b) Give the working of a septic tank? What is the leaching cess pool method of treaty efficient from the septic tank? Describe.
- (a) Describe by drawing suitable sketches, the process of activated sludge treatment as used at sewage treatment plants.

Or

- (b) Sketch and describe the working of a standard trickling filter for purification of sewage. What preliminary treatment should sewage undergo before it can be treated by the filler and why?
- 4. (a) What are the difficulties in handling solid waste? What are the sores of city garbage? How they are managed?

Or

(b) What are the sores of air pollution? What are the ill health created to human and properties? How to prevent?

 $(4 \times 10 = 40 \text{ marks})$