Reg. No. :

## Question Paper Code : 21262

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2015.

Sixth Semester

Civil Engineering

CE 2354/CE 64/10111 CE 605 — ENVIRONMENTAL ENGINEERING — II

(Regulations 2008/2010)

(Common to 10111 CE 605 – Environmental Engineering – II for B.E. (Part-Time) Sixth Semester – Civil Engineering – Regulations 2010)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — 
$$(10 \times 2 = 20 \text{ marks})$$

1. What is known as sewerage?

2. What are the sewerage systems available?

3. What do you mean by self cleansing velocity?

4. Mention any five sewer appurtenance.

5. What is called sedimentation?

6. What is a grit chamber?

7. What is meant by sludge recycle?

8. What is a trickling filter?

9. What do you understand by digestion of sludge?

10. What is known as self purification process?

PART B —  $(5 \times 16 = 80 \text{ marks})$ 

11. (a) Explain the factors affecting the estimation of sanitary sewerage flow.

Or

(b) How is the quantity of storm water runoff from a town estimated while designing scheme for the same?

12. (a) Explain the various steps involved in laying and testing of sewers.

Or

- (b) Mention which type of pump is most suitable for sewerage pumping. Give the reasons.
- 13. (a) Explain the functions of septic tank with a neat sketch.

## Or

- (b) Describe the various types of settlings.
- 14. (a) Explain the basic operations involved in activated sludge process with the help of a flow diagram.

## Or

- (b) Explain the working of an aerobic type waste stabilization pond.
- 15. (a) What is land treatment? Discuss the condition under which it is suitable.

## Or

(b) Describe briefly the heat treatment method of sludge conditioning.