Reg. No.

B.TECH. DEGREE EXAMINATION, NOVEMBER 2014

Eighth Semester

Branch: Civil Engineering

ENVIRONMENTAL ENGINEERING—II (C)

(Old Scheme—Prior to 2010 Admissions—Supplementary/Mercy Chance)

Time: Three Hours

Maximum: 100 Marks

Part A

Answer all questions.
Each question carries 4 marks.

- 1. Explain the effect of storage on quality of water.
- 2. Write a note on clariflocculators.
- 3. Explain desalination.
- 4. Explain requirements of a good disinfectant.
- 5. Write a note on effluation standards.
- 6. What are comminutes?
- 7. Explain the characteristics of sludge.
- 8. Write a note on stabilization ponds.
- 9. Explain the principle of biological treatment.
- 10. Write a note on Imhoff tanks.

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

Part B

Answer all questions.
Each question carries 12 marks.

11. (a) Explain the necessity of chemically aided sedimentation. Explain Coagulation and flocculation.

Or

- (b) Describe the aeration and sedimentation.
- 12. (a) Explain the theory, design, construction, operation and maintenance of rapid sand filters and slow sand filters.

Or

(b) Explain various types of chlorination.

Turn over

13. (a) Explain preliminary, primary, secondary and tertiary treatments.

Or

- (b) Explain sewage sedimentation with design, construction of tanks.
- 14. (a) Explain design construction and operation of trickling filters.

Or

- (b) Explain design, construction and operation of conventional and extended aeration.
- 15. (a) Explain the sludge thickening, digestion, conditioning and disposal.

Or

(b) Explain high rate aerobic methods of sewage treatment.

 $(5 \times 12 = 60 \text{ marks})$

