



4717

BOARD DIPLOMA EXAMINATION, (C-14) JUNE—2019

DCE—SIXTH SEMESTER EXAMINATION

ENVIRONMENTAL ENGINEERING—II

Time: 3 hours [Total Marks: 80

PART-A

 $3 \times 10 = 30$

Instructions: (1) Answer **all** questions.

- (2) Each question carries three marks.
- (3) Answers should be brief and straight to the point and shall not exceed *five* simple sentences.
- 1. State any three objectives of sewage disposal works.
- 2. List any six requirements of good surface drains.
- **3.** Mention different materials used for sewers.
- **4.** List any six sewer appurtenances on a sewer line.
- **5.** Draw a neat sketch of catch basin and mention its components.
- **6.** Define strength of sewage.
- 7. State the functions of grit chambers in sewage treatment plant.
- **8.** Define the terms (a) soil pipe, (b) waste pipe and (c) vent pipe.
- **9.** State any three factors affecting production of bio-gas.
- **10.** Define the term air pollution. State the natural sources of air pollution.

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PART—B 5×10=50

Instructions: (1) Answer any **five** questions.

- (2) Each question carries ten marks.
- (3) Answers should be comprehensive and the criteria for valuation are the content but not the length of the answer.
- 11. Compare conservancy system with water carriage system.
- **12.** Explain the construction and working of Shone's ejector with a neat sketch.
- **13.** Explain the principle and operation of primary sedimentation tank.
- **14.** Explain the working of a trickling filter with a neat sketch.
- **15.** Explain the methods of sanitary landfill and incineration of solid waste disposal.
- 16. State the requirements of good drainage system in buildings...
- **17.** Explain the construction and working of KVIC model bio-gas plant with a sketch.
- **18.** Explain the working of a spray chamber with the help of a sketch.

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