3724

BOARD DIPLOMA EXAMINATION, (C-09) MARCH/APRIL—2021

DCE - SIXTH SEMESTER EXAMINATION

ENVIRONMENTAL ENGINEERING—II

Time: 3 hours] [Total Marks: 80

PART—A

 $4 \times 5 = 20$

- **Instructions:** (1) Answer *any* **five** questions.
 - (2) Each question carries **four** marks.
 - (3) Answers should be brief and straight to the point and shall not exceed five simple sentences.
 - 1. Define (a) sullage and (b) sewage.
 - 2. List the various shapes of sewers.
 - 3. Define BOD.
 - 4. Define (a) equalization and (b) neutralization.
 - 5. List any six methods of sludge disposal.
 - 6. What are the components of refuse?
 - 7. Define (a) soil pipe, (b) waste pipe and (c) vent pipe.
 - 8. State the advantages of rural santitation.
 - 9. What is meant by smog?
 - Draw neat sketch of louver collector. 10.

/3724 1 [Contd...

- **Instructions:** (1) Answer *any* **four** questions.
 - (2) Each question carries **fifteen** marks.
 - (3) Answers should be comprehensive and criterion for valuation is the content but not the length of the answer.
 - 11. Compare the three systems of sewarage.
 - 12. Design a sewer which receives combined sewage from a small district at the rate of 800 lt/sec. The sewar runs half full. Assume the value of coefficient of rugosity as 0.013 and bed slope of 1 in 100.
 - 13. Explain the manhole with the help of a neat sketch.
 - 14. Explain the principle and operation of primary sedimentation tanks.
 - **15.** List various sludge disposal methods and explain any three in detail.
 - 16. Describe the Indore method of composting.
 - **17**. Explain the sanitary land fill method to dispose solid waste.
 - 18. What are the duties of site engineer in construction industry?