

c14-c-502

4619

BOARD DIPLOMA EXAMINATION, (C-14) SEPTEMBER/OCTOBER - 2020 DCE—FIFTH SEMESTER EXAMINATION

ENVIRONMENTAL ENGINEERING-I

Time : 3 hours]

Total Marks : 80

PART—A

3×10=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. What is meant by acid rain?
- 2. What is the necessity of forecasting population?
- **3.** State any six factors affecting per capita demand.
- 4. Define (a) yield of well, (b) circle of influence and (c) draw down.
- 5. List out various surface and subsurface sources of water.
- 6. Define (a) E-coli and (b) MPN.
- 7. List the methods of chlorination.
- 8. List any three objects of testing of water.
- 9. What is the necessity of storage reservoir?
- 10. Define (a) water main, (b) distribution pipe and (c) air gap.
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PART-B

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

- (2) Each question carries **ten** marks.
- (3) Answers should be comprehensive and the criterion for valuation is the content but not the length of the answer.
- **11.** State and explain the various demands or requirements of water consumption.
- **12.** Explain procedure of laying of pipeline.
- **13.** Explain infiltration well with the help of neat sketch.
- **14.** Explain the construction and working of a slow sand filter with the help of a neat sketch.
- **15.** Explain the various types of sedimentation tanks.
- **16.** State the different distribution systems and explain any two of them with neat sketches.
- **17.** Draw the sketch of general layout of water supply arrangements for single-storey building and write details.
- **18.** Explain the different layouts of distribution system in detail with sketches.

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