

**DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/
MANAGEMENT/COMMERCIAL PRACTICE, NOVEMBER - 2024**

ENVIRONMENTAL ENGINEERING

[Maximum Marks: **100**]

[Time: **3 Hours**]

PART-A

[Maximum Marks: **10**]

I. (Answer **all** questions in one or two sentences. Each question carries **2** marks)

1. Define specific yield.
2. List the types of filters for purification of water.
3. Define sewerage.
4. Write the use of grit chambers.
5. List out any two methods of disposal of sewage waste. (5 x 2 = 10)

PART-B

[Maximum Marks: **30**]

II. (Answer **any five** of the following questions. Each question carries **6** marks)

1. List the needs for protected water supply.
2. Explain infiltration galleries with a neat sketch.
3. Explain radial system of water distribution with sketch.
4. Describe sedimentation aided with coagulation.
5. Explain conservancy system of sewage disposal.
6. Explain briefly trickling filters.
7. Describe the different types of traps with neat sketches. (5 x 6 = 30)

PART-C

[Maximum Marks: **60**]

(Answer **one** full question from each Unit. Each full question carries **15** marks)

UNIT – I

- III. a. List the factors affecting percapita demand. (7)
b. Explain the procedure of direct pumping test for determination of yield of a well. (8)

OR

- IV. a. Explain any two population forecasting methods. (8)
b. List the various standards of potable water. (7)

UNIT – II

- V. a. Describe with sketch the river intake. (8)
b. Explain the terms (i) pre chlorination (ii) super chlorination and (iii) break point chlorination. (7)

OR

- VI. a. Explain rapid sand filter with a neat sketch. (9)
b. Differentiate between gravity system and combined system of water distribution. (6)

UNIT- III

- VII. a. Explain the types of sewerage systems. (7)
b. Explain an drop manhole with a neat sketch. (8)

OR

- VIII. a. Discuss on any two materials used for sewers. List the merits and demerits of each. (8)
b. Explain the factors affecting dry weather flow. (7)

UNIT - IV

- IX. a. Describe working of oxidation pond. List its advantages and disadvantages. (8)
b. Explain the working of an anti siphonage pipe with a neat sketch. (7)

OR

- X. a. Explain the working of a skimming tank with a neat sketch. (7)
b. State the functions of Pollution Control board. (8)
