

**DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/
COMMERCIAL PRACTICE, NOVEMBER - 2025**

PUBLIC HEALTH ENGINEERING

[Maximum marks: 75]

[Time: 3 Hours]

PART A

I. Answer all the following questions in one word or one sentence. Each question carries 1 mark

(9 x 1 = 9 Marks)

		Module outcome	Cognitive level
1	List any two underground sources of water.	M1.01	R
2	List any 2 physical characteristics of drinking water.	M1.03	R
3	List any two types of joints used in conveyance system.	M1.04	R
4	State the necessity of disinfection of water.	M2.02	R
5	List two methods adopted for removal of taste and odour from water.	M2.04	R
6	State any one objective of providing sewerage works.	M3.01	R
7	List any two sewer appurtenances.	M3.03	R
8	Name the treatment unit provided to remove oil and grease from sewage.	M4.02	R
9	Name the sanitary fitting provided to prevent entry of foul gases into house.	M4.04	R

PART B

II. Answer any eight questions from the following. Each question carries 3 marks.

(8 x 3 = 24 Marks)

		Module outcome	Cognitive level
1	Explain variations of water demand.	M1.02	U
2	Explain the need for analysis of water.	M1.03	U
3	List any 3 chemical characteristics of water.	M1.03	R
4	Explain choice of pipe material in conveyance system.	M1.04	U
5	Discuss the advantages and disadvantages of intermittent method of water supply.	M2.05	U
6	Define the terms - sewage, sewerage and sullage.	M3.01	R
7	Explain merits of circular section of sewers.	M3.02	U
8	Explain dry weather flow.	M3.02	U
9	Explain the functions of drop manhole in a sewerage system.	M3.03	U
10	Describe aerated lagoons.	M4.03	U

PART C

Answer all questions. Each question carries seven marks

(6 x 7 = 42 Marks)

		Module outcome	Cognitive level										
III	Explain any one test to determine yield of well.	M1.01	A										
OR													
IV	Table below shows population data of a town.	M1.02	A										
<table><tr><td>Year</td><td>Population</td></tr><tr><td>1980</td><td>21000</td></tr><tr><td>1990</td><td>30000</td></tr><tr><td>2000</td><td>42000</td></tr><tr><td>2010</td><td>53000</td></tr></table>		Year	Population	1980	21000	1990	30000	2000	42000	2010	53000		
Year	Population												
1980	21000												
1990	30000												
2000	42000												
2010	53000												
Estimate the population of year 2030 using arithmetical increase method and incremental increase method.													
V	Explain the construction of rapid sand filters.	M2.03	U										
OR													
VI	Draw the layout of grid system of water distribution. Explain merits and demerits of this system.	M2.05	U										
VII	Explain sedimentation by coagulation for raw water treatment.	M2.02	U										
OR													
VIII	Explain the function and working of sluice valves in distribution system.	M2.05	U										
IX	Explain separate sewerage system.	M3.02	U										
OR													
X	Explain physical characteristics of sewage.	M3.04	U										
XI	Outline the functions and working of grit chambers.	M4.02	U										
OR													
XII	Explain the construction of Septic tank.	M4.03	U										
XIII	Describe Trickling filters used for treatment of sewage.	M4.03	U										
OR													
XIV	Explain flushing cisterns.	M4.04	U										
