

TED (10)–4011

Reg. No.

(REVISION—2010)

Signature

FOURTH/SIXTH SEMESTER DIPLOMA EXAMINATION IN ENGINEERING/
TECHNOLOGY—MARCH, 2013

ENVIRONMENTAL ENGINEERING

[For IVth Semester EN and WR and VIth Semester CE and QS]

[Time : 3 hours

(Maximum marks : 100)

PART—A

(Maximum marks : 10)

Marks

I Answer the following questions in one or two sentences. Each question carries 2 marks.

1. What is per capita demand of water ?
2. What is aeration of water ?
3. Distinguish between sewerage and sewer.
4. What is runoff co-efficient ?
5. What is a Aerosol ?

(5×2=10)

PART—B

(Maximum marks : 30)

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

1. What is pipe corrosion? Explain causes and preventive measures.
2. Explain rapid sand filter with a neat sketch.
3. Explain the following :
(a) Sewage (b) Garbage (c) Refuse (d) Sullage.
4. Explain factors effecting dry weather flow.
5. With a neat sketch explain skimming tank.
6. What is sludge? Explain sludge digestion.
7. What is sedimentation? Explain plain sedimentation.

(5×6=30)

PART—C

(Maximum marks : 60)

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

UNIT—I

- III (a) What are the factors effecting per capita demand ?
- (b) With a neat sketch explain infiltration galleries.

7

8

OR

		Marks
IV	(a) What is meant by yield of a well ? Explain the method of determining yield of a well by pumping test.	8
	(b) Draw a neat sketch of reservoir intake and explain its parts.	7
UNIT—II		
V	(a) Explain chemical and bacteriological test for potable water.	7
	(b) Explain features and operation of pressure filter with a neat sketch.	8
OR		
VI	(a) What are the advantages and disadvantages of intermittent and continuous systems of water supply ?	8
	(b) Explain Grid iron system with figure.	7
UNIT—III		
VII	(a) What is meant by water carriage system and what are the merits and demerits of the system ?	8
	(b) Explain combined system of sewerage and partially separate system of sewerage.	7
OR		
VIII	(a) What are the merits and demerits of circular and egg shaped sewer ?	8
	(b) With a neat sketch explain drop manhole.	7
UNIT—IV		
IX	(a) With a neat sketch explain the working of Flushing tank.	8
	(b) What are the sources of air pollution and its ill-effects on human health ?	7
OR		
X	(a) Explain activated sludge process in sewage treatment.	8
	(b) What are the functions of State Pollution Control Board regarding water pollution ?	7