



R20 Regulation

Subject code:3P6AB

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous, Accredited by NAAC with 'A+' Grade)

B.Tech VI Semester Supplementary Examinations, May 2025

ENVIRONMENTAL ENGINEERING

(CE)

Maximum Marks: 70

Date: 18.06.2025

Duration: 3 hours

- Note: 1. This question paper contains two parts A and B.
 2. Part A is compulsory which carries 20 marks. Answer all questions in Part A.
 3. Part B consists of 5 Units. Answer any one full question from each unit.
 4. Each question carries 10 marks and may have a, b, c, d as sub questions.

Part-A

All the following questions carry equal marks (10X2M=20 Marks)		Marks	CO	BTL
1	What is meant by water borne diseases?	2M	1	L1
2	Classify the various sources of water.	2M	1	L1
3	Mention the need for protected water supply.	2M	2	L1
4	Draw a neat sketch of slow sand filter.	2M	2	L1
5	What is meant by sewage and sullage?	2M	3	L1
6	List out type of sewer appurtenances.	2M	3	L1
7	Define flocculation.	2M	4	L1
8	What are the types trickling filter and mention its working?	2M	4	L1
9	List out how to Control gaseous pollutants.	2M	5	L1
10	Mention the terms of flume behavior.	2M	5	L1

Part-B

Answer All the following questions. (5X10M=50Marks)		Marks	CO	BTL
11	The population data for a town is given below. Find out the population in the year 2021, 2031 and 2041 by (a) arithmetical (b) geometric (c) incremental increase methods. Year 1971 1981 1991 2001 2011 Population 84,000 1, 15,000 1, 60,000 2, 05,000 2, 50,000	10M	1	L2
OR				
12	a) Discuss in detail classification of sources of water. b) Draw a neat sketch of layout of water treatment plant.	5M 5M	1	L2
13	Elaborate different types of sedimentation tanks and explain any two with neat sketch.	10M	2	L2
OR				
14	Discuss the merits and demerits of different layouts of water distribution network.	10M	2	L2
15	Discuss the following terms a) Conservancy system, b) Water carriage system, c) Separate sewerage system, d) Combined sewerage system	10M	3	L2
OR				

16	What are the characteristics of sewage explain any two in detail?	10M	3	L2
17	Discuss in detail with neat sketch of any one biological treatment units and its process.	10M	4	L2
OR				
18	Discuss in detail about various sludge treatment and disposal methods.	10M	4	L2
19	Discuss in detail various types of pollutants and its effects on environment.	10M	5	L2
OR				
20	Discuss in detail in control methods of air pollution.	10M	5	L2