



R18 Regulation

Subject code:2P6AA

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech VI Semester Supplementary Examinations, December 2024

Environmental Engineering (Civil Engineering)

Maximum Marks: 70

Date:10.01.2025

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 which carries 10M.
 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)		CO	Bloom Tx
1	What is meant by water borne diseases?	1	L1
2	Classify the various sources of water.	1	L1
3	Mention the need for protected water supply.	2	L1
4	Draw a neat sketch of slow sand filter.	2	L1
5	What is meant by sewage and sullage?	3	L1
6	List out type of sewer appurtenances.	3	L1
7	Define flocculation and theory of filtration.	4	L1
8	What are the types trickling filter and mention its working?	4	L1
9	List out various air pollution issues on environment.	5	L1
10	What are the air pollution control equipments?	5	L1

Part-B

Answer All the following questions. (5X10M=50Marks)		CO	Bloom Tx
11	The population data for a town is given below. Find out the population in the year 2021, [10M] 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	1	L2
OR			
12	A) Discuss in detail classification of sources of water [5M] B) Draw a neat sketch of layout of water treatment plant [5M]	1	L2
13	Elaborate the various methods used for supply of water to the city with neat sketch. [10M]	2	L2
OR			
14	Discuss the merits and demerits of different layouts of water distribution network. [10M]	2	L2
15	Explain with a neat sketch principle operation of oxidation pond. [10M]	3	L2
OR			

16	Explain with neat sketch of various types of plumbing system adopted in houses. [10M]	3	L2
17	Discuss in detail with neat sketch of physical 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 Control of gaseous pollutants, automobile pollution and control. [10M]	5	L2
	OR		
20	Discuss in detail Gravity settlers, cyclone filters, ESPs. [10M]	5	L2