R20 Regulation *Subject code: 3P6AB*

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech VI Semester Regular/Supplementary Examinations, July2024

ENVIRONMENTAL ENGINEERING
(CIVIL ENGINEERING)

Maximum Marks: 70 Date:22.07.2024 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 are the sources of water?	1	I
2	Write about water borne diseases?	1	I
3	What are the objectives of water supply system?	2	I
4	Explain break point chlorination?	2	II
5	How do you quantify sewage?	3	I
6	What are the advantages of cast iron pipes?	3	I
7	What are pressure filters?	4	I
8	What do you understand by treatment of water? Why it is necessary?	4	I
9	What are the sources of air pollution?	5	I
10	What is meant by acid rains?	5	I

Part-B

Answer All the following questions. (5X10M=50Marks)			
11	A. What is the importance of public water supply scheme in present day life?[5] B. Given the following data, calculate the population at the end of next three decades by decreasing rate method. [5] Year 1980 1990 2000 2010 Population 90000 140000 188000 328580	1 1	I V
	OR		
12	A. Explain the types of water demands and its variations. [5] B. What are the factors governing the design period? [5]	1 1	II I
13	Draw the layout of water treatment unit? Explain briefly each of them. [10]	2	VI
	OR		
14	A. Describe various methods of application of coagulants. [5] B. Explain the principle of Rapid sand filter (Gravity type). [5]	2 2	II II
15	Explain about pipe appurtenances which are provided at various suitable places along the pipe lines. [10]	3	II

	OR		
16	A. Discuss about laying and testing of pipe lines. [5] B. Explain any three minor methods of disinfection. [5]	3 3	II II
17	Explain the principle of working of skimming tank. [10]	4	II
	OR		
18	Explain with neat sketch about Sewage treatment plant. [10]	4	II
19	Explain global warming and acid rains with suitable example. [10]	5	II
	OR		
20	A. What are the various measures to control automobile pollution? [5] B. Explain causes of air pollution. [5]	5 5	I I