R20 Regulation *Subject code: 3P6AB*

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech VI Semester Supplementary Examinations, February 2024

ENVIRONMENTAL ENGINEERING

(Civil Engineering)

Maximum Marks: 70 Date:17.02.2024 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	Explain fire demand with formule.	CO1	L2
2	What are factors effecting the water demand?	CO1	L1
3	Define coagulation.	CO2	L1
4	Write Layout of water treatment units.	CO2	L1
5	Explain about Manholes	CO3	L2
6	Define Traps.	CO3	L2
7	What is the need of Pumping Sewage?	CO4	L1
8	What is Sedimentation Tank?	CO4	L1
9	What are the different sources of air pollution?	CO5	L1
10	Define Meteorology and state its significance?	CO5	L1

Part-B

	Answer All the following questions. (5X10M=50Marks)		
11	A. Population of a town as obtained from the census reports as follows: (5M)	CO1	L2

Year	1901	1911	1921	1931	1941	1951	1961
Population	20831	25293	26423	30263	38284	49909	67105

Estimate the population of a town as in 1981,1991,2001 by Arithematic Increase Method.

B. State and Explain about the different types of Water Demands. (5M)

OR

12	Explain in detail various types of test to be conducted for assuring quality of drinking water. (10M)	CO1	L2
13	Explain with a neat sketch Slow Sand Filter. (10M)	CO2	L2
	OR		
14	What is Chlorination? Explain it briefly. (10M)	CO2	L1
15	Explain about Layouts of Distribution Systems. (10M)	CO3	L2
	OR		
16	Explain about the advantages and disadvantages of a Conservancy System. (10M)	CO3	L2
17	What are the Advantages and Disadvantages of Activated Sludge Process? (10M)	CO4	L1
	OR		
18	Explain about the Design of Grit Chambers. (10M)	CO4	L2
19	What are the different sources of air pollution? (10M)	CO5	L1
	OR		
20	Explain about primary meteorological factors that influence air pollution? (10M)	CO5	L2