



R20 Regulation

Subject code:3P6AB

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:30.12.2024

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 methods available to predict future population?	1	L1
2	Mention various types of water borne diseases.	1	L1
3	List out the types of pumps and pipes.	2	L1
4	Mention various types of screens.	2	L1
5	What are the factors influence anaerobic digestion?	3	L1
6	List out types valves and pipe fittings.	3	L1
7	Define manhole.	4	L1
8	Define BOD and COD.	4	L1
9	Recall types of pollutants.	5	L1
10	What are the effects of air pollution on human?	5	L1

Part-B

Answer All the following questions. (5X10M=50Marks)		CO	Bloom Tx
11	Explain the various sources of water and mention the necessary of water treatment. (10M)	1	L2
OR			
12	Explain the terms A) Variation of water demand and fluctuation. (5M) B) Infiltration Galleries and water borne and water related diseases (5M)	1	L2
13	Elaborate the different tests methods and explain how to determine PH, Hardness, Chlorides for determining the suitability of drinking water. (10M)	2	L2
OR			
14	Explain with the help of neat sketch the construction and working of rapid sand filter. (10M)	2	L2
15	Elaborate the different shapes of sewers and materials used for sewers along with their suitability. (10M)	3	L2
OR			
16	Discuss about the various types of pipes with merits and demerits. (10M)	3	L2
17	Explain briefly about the primary, secondary and tertiary treatment of waste water. (10M)	4	L2

	OR		
18	Describe the aerobic, anaerobic sludge digestion process. (10M)	4	L2
19	Discuss in detail various types of air pollutants and its effects on environment. (10M)	5	L2
	OR		
20	Discuss in detail about the control methods air pollution. (10M)	5	L2