R20 Regulation *Subject code: 3P6AB*

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech VI Semester Supplementary Examinations, November 2025

ENVIRONMENTAL ENGINEERING

(CE)

Maximum Marks: 70 Date: 21.11.2025 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	Draw a neat sketch of hydrologic cycle.	2M	1	L1
2	What are types of intakes?	2M	1	L1
3	Define sedimentation and coagulation.	2M	2	L1
4	Draw a neat sketch of slow sand filter.	2M	2	L1
5	What is meant by sewage and sludge?	2M	3	L1
6	List out type of sewer appurtenances.	2M	3	L1
7	Write notes on grit chamber.	2M	4	L1
8	Define BOD and COD.	2M	4	L1
9	Write the types of pollutants.	2M	5	L1
10	Mention the layers of atmosphere.	2M	5	L1

Part-B

Answer All the following questions. (5X10M=50Marks)		Marks	CO	BTL
11	a) Differentiate confined and unconfined aquifers. b) Explain the basic functioning of the hydrological cycle.	5M 5M	1	L2
	OR			
12	Explain the various types of chlorination and various forms of chlorines.	10M	1	L2
13	Elaborate the various methods used for supply of water to the city with neat sketch.	10M	2	L2
	OR			
14	Explain with the help of neat sketch the construction and working of rapid sand filter.	10M	2	L2
15	Explain about pump and pump house.	10M	3	L2
	OR			
16	Discuss about the various types of pipes with merits and demerits.	10M	3	L2

17	Discuss in detail about the operation of Trickling filter with neat sketch.	10M	4	L2
	OR			
18	Discuss briefly on: a. Oxidation pond. b. Sludge treatment.	5M 5M	4	L2
19	Discuss in detail various sources of air pollution and types of pollutants.	10M	5	L2
	OR			
20	Explain in short on global warming and ozone depletion.	10M	5	L2