R18 Regulation *Subject code:2E7AA*

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech VII Semester Supplementary Examinations, December 2024

Water Resource Engineering-II

(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 is reservoir	1	L1
2	Write short notes on reservoir losses	1	L1
3	List out types of dams based on purpose or application	2	L1
4	Draw a neat sketch of diaphragm earth dam	2	L1
5	What is meant by phereatic line	3	L1
6	State khosla theory	3	L1
7	Define spillway gates	4	L1
8	What is meant by Stiling basins	4	L1
9	Define silt excludes	5	L1
10	State lacey's theory	5	L1

Part-B

Answer All the following questions. (5X10M=50Marks)		CO	Bloom Tx
11	Classify various types of dams. Discuss the factors that affect the selection of type of dam. [10M]	1	L2
	OR		
12	What is meant by reservoir discuss briefly the different types of reservoirs. [10M]	1	L2
13	Discuss the classification of earth dams with neat sketches bringing out their relative merits and Demerits. [10M]	2	L2
	OR		
14	Explain briefly about the forces acting on the gravity dam and also explain the causes of failure. [10M]	2	L2
15	What is meant by semi modular outlet and explain proportionality of an outlet, how APM outlet is working as semi module outlet. [10M]	3	L2
	OR		
16	Explain the functions of upstream and downstream piles and inverted floor at the downstream end of impervious floor. [10M]	3	L2

17	Draw a neat sectional view of weir showing the various parts what is exit gradient how does it affect the design weir. [10M]	4	L2
	OR		
18	Compute the discharge over an ogee spill way with coefficient of discharge C= 2.2 at a head of 4.2m. the effective length of the spillway is 120 m. neglect the velocity of approach. [10M]	4	L2
19	What are canals falls why are they constructed. [10M]	5	L2
	OR		
20	Write in detail about sarada type fall and straight fall. [10M]	5	L2