Regulation R18 *Subject code: 2E7AA*

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech VII Semester Supplementary Examinations, May 2026

Water Resources Engineering-II

(Civil Engineering)

Maximum Marks: 70 Date:07.05.2026 Duration: 3 hours

Note: **1.This question paper contains two parts A and B.**
2. Part A is compulsory which carries 10 marks. Answer all questions in Part A.
3. Part B consists of 5 Units. Total 20 questions it consists.
4. Part-B 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)
1	What is reservoir?	
2	Write short notes on reservoir losses.	
3	List out types of dams based on purpose or application.	
4	Write any two forces acting on gravity dams.	
5	Define homogeneous earth dam.	
6	Draw a neat sketch of zoned embankment dam.	
7	What is meant by spillway?	
8	Define weirs and barrages.	
9	What is meant by canal drops?	
10	Mention types of diversion heads.	
	Part-B	
Answer All the following questions.		(5X10M=50Marks)
11	Classify various types of dams. Discuss the factors that affect the selection of type of dam. (10M)	
	OR	
12	What is meant by reservoir discuss briefly the different types of reservoirs. (10M)	
13	Discuss the modes of failures and criteria for structural stability of gravity dams. (10M)	
	OR	
14	Discuss the factors that affect the selection of type of a reservoirs and draw mass curve for reservoir sedimentation. (10M)	
15	Discuss briefly various types of energy dissipaters that are used for energy Dissipation below overflow spillway, under different relative positions of TWC and JHC. (10M)	
	OR	
16	Explain the method of stability analysis of downstream slope during steady seepage. (10M)	

17	Discuss the causes of failures of weirs on permeable foundations and suggest suitable control measures for each type of failure. (10M)
	OR
18	Explain Khosla's method of independent variables. How do you apply corrections for interference of piles and inclination of floor. (10M)
19	What is meant by canal drops why are canal drops constructed in a canal system. (10M)
	OR
20	Write short notes on i) Syphon ii) Super passage iii) Syphon aqueduct iv) Canal syphon v) Level crossing (2MX5=10M)