



R22 Regulation

Subject code: 4P6AA

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech VI Semester Regular Examinations, May 2025

WATER RESOURCES ENGINEERING - II

(CE)

Maximum Marks: 60

Date: 25.06.2025

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. 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 (10X1M=10 Marks)		Marks	CO	Bloom Tx
1.a)	Write the Types of Reservoirs?	1M	CO 1	L1
b)	Write the Types of Dams?	1M	CO 1	L1
c)	Write about Gravity Dam?	1M	CO 2	L1
d)	Write the Factors of Safety of Gravity Dam?	1M	CO 2	L1
e)	Write the Causes of failure of Earth Dam?	1M	CO 3	L1
f)	Define Spillways.	1M	CO 3	L1
g)	Define Weirs.	1M	CO 4	L1
h)	Define Barrages.	1M	CO 4	L1
i)	Write the Types of Falls?	1M	CO 5	L1
j)	Define Notch.	1M	CO 5	L1

Part-B

Answer All the following questions. (5X10M=50Marks)		Marks	CO	Bloom Tx
2	Explain about Reservoirs catchment area based on contours & Selection of Site for Reservoir.	10M	CO 1	L2
OR				
3	a) Write the classification of Dams, Types of Dams? b) What are the factors Affecting Selection of Types of Dam?	5M 5M	CO 1 CO 1	L2 L2
4.	Explain the Causes of Failure of a Gravity Dam.	10M	CO 2	L2
OR				
5	Explain the various forces acting on the gravity dam.	10M	CO 2	L2
6	Define spillways and explain types of Spillways with a neat sketch.	10M	CO 3	L2
OR				
7	Explain the types of Earth Dams, Causes of failure of Earth Dam.	10M	CO 3	L2
8	Draw the Layout of diversion Head Work – Components and explain in detail.	10M	CO 4	L2
OR				

9	Design a vertical drop weir on Bligh's theory. Maximum flood discharge=2800cumecs H.F.L before construction=285.0m Minimum water level=278.0m(d/s bed level) F.S.L of a canal=284.0m Allowable afflux=1m Coefficient of creep=12 Permissible exit gradient=1/6 Assume any other data not given.	10M	CO 4	L4
10	Explain the types of Cross Drainage Works and Selection of a Site. OR	10M	CO 5	L2
11	Explain the types of falls and their location.	10M	CO 5	L2