



Regulation R18

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

Subject code: 2E7AA

B.Tech VII Semester Supplementary Examinations, April 2024

Water Resources Engineering-II

(Civil Engineering)

Maximum Marks: 70

Date: 24.04.2024 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. Total 10 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 Define surcharge storage
- 3 Explain the functions of drainage galleries
- 4 Mention types of canals
- 5 Define homogeneous earth dam
- 6 State Khosla theory
- 7 Define spillway gates
- 8 Define sub proportional outlet
- 9 Define silt excludes.
- 10 Define Canal regulators.

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. [10]

OR

- 12 Explain in detail various classification of dams and its uses. [10]

- 13 Describe various types of siphon spillways and explain the design principles of ogee spillways. [10]

OR

- 14 Explain in detail how to control seepage failure in earth dams. [10]

- 15 Describe various methods of construction earth dams and mention the parameters considered while design earth dams. [10]

OR

- 16 Define cross drainage works and classify various cross drainage works. [10]

- 17 Discuss the causes of failures of weirs on permeable foundations and suggest suitable control measures for each type of failure. [10]

OR

- 18 What is meant by Afflux, how does it effect the design of weirs and barrages? [10]

- 19 What is meant by canal regulations and what are the different types of canal regulation works. [10]

OR

- 20 Write in detail about sarada type fall and straight fall? [10]