



R17 Regulation

Subject code: 1E7AD

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech IV Year I Semester Regular Examinations, February 2021

WATER RESOURCES ENGINEERING -II

(Civil Engineering)

Maximum Marks: 70

Date: 27.02.2021 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)

1. Classify the various zones of storage in a reservoir
2. What is meant by reservoir yield?
3. List the causes of failure of gravity dam.
4. What are inspection galleries?
5. How does a spillway differ from sluice?
6. List the components of earth dam.
7. Differentiate weir and barrage.
8. Define TWC & JWC.
9. State the functions of canal head regulator.
10. What are canal falls? Why is it required?

Part-B

Answer All the following questions.

(10M X 5=50Marks)

11. Discuss in detail points to be consider selection of dams and reservoirs. (10M)
OR
12. Explain the classification of dams with examples. (10M)
13. What are the various forces acting on a gravity dam? Explain them in detail. (10M)
OR
14. State the design criteria of a concrete gravity dam and explain how you will determine the various safety factors against possible failures.(10M)
15. What are earth dams and Explain in detail the causes of failure of earth dams.(10M)
OR
16. What are spillways and explain the different types of spillways.(10M)
17. Describe in detail about the component parts of diversion works.(10M)
OR
18. Explain in detail various types of earth dams. .(10M)
19. What do you understand by the term 'Cross drainage works'. Explain the types of cross drainage works with neat sketches.(10M)
OR
20. What are canal drops. Explain with neat sketch of various types of canal drops. (10M)