



**B.Tech IV Year I Semester Supplementary Examinations, July 2022**  
**WATER RESOURCE ENGINEERING-II**

(CE)

**Maximum Marks: 70**

Duration: 3 hours

Part-A

All the following questions carry equal marks

(10x2M=20 Marks)

- 1 Mention the parts of dam.
- 2 Define surcharge storage.
- 3 What are essential requirements of spillway
- 4 Draw a neat sketch of diaphragm earth dam
- 5 What is meant by phreatic line
- 6 State khosla theory
- 7 Define cross regulators
- 8 Write notes on factor of safety of gravity dam
- 9 Write notes on inspection galleries
- 10 Define silt ejectors

Part-B

Answer All the following questions.

(5X10M=50Marks)

- 11 Draw a neat sketch of reservoir with parts and explain how the storage capacity of a reservoir is fixed. [10]  
OR
- 12 Explain in detail various classification of dams and its uses. [10]
- 13 Discuss the classification of earth dams with neat sketches bringing out their relative merits and demerits. [10]  
OR
- 14 Explain briefly about the forces acting on the gravity dam and also explain the causes of failure. [10]
- 15 Discuss in detail about various causes for failure of earthen dams. [10]  
OR
- 16 Classify the various types of spillways and explain any two spillways with neat sketch. [10]
- 17 Draw a neat sketch of layout of diversion headworks and explain its components. [10]  
OR
- 18 What is meant by Afflux, how does it effect the design of weirs and barrages. [10]
- 19 What are canals falls why are the constructed. [10]  
OR
- 20 Write in detail about sarada type fall and straight fall. [10]