

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE**Supplementary Semester Examination – Summer 2022****Course: B. Tech.****Branch: Civil Engineering****Semester: VII****Subject Code & Name: BTCVVC703 Water Resource Engineering****Max Marks: 60****Date: 22/08/2022****Duration: 3.45 Hrs.****Instructions to the Students:**

1. All the questions are compulsory.
2. The level of question/expected answer as per OBE or the Course Outcome (CO) on which the question is based is mentioned in () in front of the question.
3. Use of non-programmable scientific calculators is allowed.
4. Assume suitable data wherever necessary and mention it clearly.

(Level/CO) Marks

Q. 1	Solve the following questions.	12
A)	Explain types of irrigation system.	CO1 06
B)	Explain classes of soil water with neat labelled sketches	CO2 06
Q.2	Solve Any Two of the following.	12
A)	Explain forces acting on a gravity dam with neat labelled diagram.	CO2 06
B)	Explain the various levels in reservoir with suitable diagram.	CO2 06
C)	What are the different modes of failure of gravity/ earthen dam?	CO2 06
Q. 3	Solve Any Two of the following.	12
A)	What do you mean by spillways? Why are spillways provided in dams? Enlist the types of spillways.	CO2 06
B)	Explain cross drainage works in detail.	CO2 06
C)	Why should lining be provided in canals? What are the merits and demerits of canal lining?	CO2 06
Q.4	Solve Any Two of the following.	12
A)	Explain various forms of precipitation.	CO1 06
B)	Define the following terms: 1. Specific yield	CO1 06
	2. Unit Hydrograph	
	3. Aquiclude	
C)	What are the comparative advantages of well and canal irrigation?	CO 2 06
Q. 5	Solve the following questions.	12
A)	How to reclaim the water-logged alkaline sands.	CO 1 06
B)	What are the preventive and curative measures of water logging?	CO1 06

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