

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

Supplementary Semester Examination – Summer 2022

Course: B. Tech.

Branch: Civil Engineering

Semester: VII

Subject Code & Name: BTCVC703 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 2. Unit Hydrograph 3. Aquicludes	CO1	06
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

*** End ***