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CBCS SCHEME

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BCV654A

Sixth Semester B.E./B.Tech. Degree Examination, June/July 2026
Water Conservation and Rainwater Harvesting

Time: 3 hrs. Max. Marks: 100

Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.
2. M : Marks , L: Bloom's level , C: Course outcomes.

		Module – 1	M	L	C
Q.1	a.	Explain the significance of water in relation to monsoon.	6	L3	CO1
	b.	Define Rainfall. Explain the characteristics and distribution of rainfall.	8	L1	CO1
	c.	What are the major causes of from the soil loss? List out measurement techniques for soil loss.	6	L1	CO1
		OR			
Q.2	a.	Discuss the status of water resource in Karnataka and their importance.	10	L3	CO1
	b.	Explain the hydrological cycle with neat diagram.	10	L3	CO1
		Module – 2			
Q.3	a.	What is Acquifer? Explain different types of aquifer present in groundwater hydrology.	10	L1	CO2
	b.	What is Water Harvesting? Explain the need and principles of water harvesting.	10	L3	CO2
		OR			
Q.4	a.	Explain the methods of water harvesting.	10	L3	CO2
	b.	What are the benefits and limitations of rooftop rainwater harvesting?	10	L1	CO2

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		Module – 3			
Q.5	**a.**	What are the major factors affecting ground water recharge?	**6**	**L1**	**CO3**
	b.	Describe the procedure for calculating available rainwater for harvesting.	**7**	**L3**	**CO3**
	c.	Discuss the steps involved in designing a rainwater system.	**7**	**L3**	**CO3**
		OR			
Q.6	**a.**	What are technical considerations in preparing groundwater recharge plan?	**10**	**L2**	**CO3**
	b.	Explain the process and benefits of reviving traditional ground water recharge techniques.	**10**	**L3**	**CO3**
		Module – 4			
Q.7	**a.**	Discuss the importance of water conservation in daily life.	**10**	**L3**	**CO4**
	b.	Write short notes on reuse and recycle of water.	**10**	**L3**	**CO4**
		OR			
Q.8	**a.**	What are the methods to eliminate water losses in a distribution system?	**10**	**L1**	**CO4**
	b.	What are the various water conservation strategies to prevent pollution? Explain.	**10**	**L1**	**CO4**
		Module – 5			
Q.9	**a.**	Explain the need for subsurface investigation in ground water studies.	**10**	**L3**	**CO5**
	b.	Discuss the common methods used for ground water exploration.	**10**	**L3**	**CO5**
		OR			
Q.10	**a.**	Explain the concept of water foot print and its types with examples.	**10**	**L3**	**CO5**
	b.	How can sustainability by assessed through groundwater data.	**10**	**L3**	**CO5**

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