

THE KAVERY ENGINEERING COLLEGE*(An Autonomous Institution)***UG/PG DEGREE END SEMESTER THEORY EXAMINATIONS, APRIL-MAY 2026***Sixth Semester**Civil Engineering***CE3036 – GROUNDWATER ENGINEERING***Regulations - 2021***Duration : 3 Hrs****Maximum : 100 Marks****PART – A (ANSWER ALL QUESTIONS) (Marks 10*2=20)**

Q.No	Questions	BTL	CO	Marks
1.	Define permeability.	L1	1	2
2.	Differentiate between confined and unconfined aquifer?	L2	1	2
3.	Write short note on cone of depression.	L1	2	2
4.	Differentiate Collector well and Infiltration gallery.	L2	2	2
5.	What is the need for groundwater management?	L1	3	2
6.	Classify the types of groundwater models?	L1	3	2
7.	Define potable water.	L1	4	2
8.	Outline the various sources of water.	L2	4	2
9.	What do you mean by ASR?	L1	5	2
10.	Write about injection well.	L1	5	2

PART – B (ANSWER ALL QUESTIONS) (Marks 5*16 = 80)

Q.No	Questions	BLT	CO	Marks
11. a	Explain different types of aquifers with neat sketches.	L2	1	16
Or				
b	Explain Darcy's Law and steady radial flow into a well.	L2	1	16
12. a	Analyze the Theis method for unsteady flow in wells.	L4	2	16
Or				
b	Assess the factors affecting specific capacity and safe yield of wells.	L4	2	16
13. a	Describe the concept of groundwater balance in basin management.	L2	3	16
Or				
b	Explain the methods to determine Database for Groundwater Management	L2	3	16
14. a	Analyze the origin and movement of groundwater with respect to hydrogeological conditions.	L4	4	16
Or				
b	Examine drinking water quality based on BIS standards for different uses.	L4	4	16

15.	a	Discuss the performance of ASR in groundwater conservation.	L2	5	16
Or					
	b	Explain in detail about protection zone delineation and remediation schemes?	L2	5	16
