

THE KAVERY ENGINEERING COLLEGE*(An Autonomous Institution)***B.E/B.TECH DEGREE END SEMESTER THEORY EXAMINATIONS, APRIL-MAY 2025***Sixth Semester**Agricultural Engineering***AI3602 - Irrigation and Drainage Engineering***Regulations – 2021***Duration : 3 Hrs****Maximum : 100 Marks****PART – A (ANSWER ALL QUESTIONS) (Marks 10*2=20)**

Q.No	Questions	BLT	CO	Marks
1.	Define irrigation.	L1	1	2
2.	Indicate the types of irrigation.	L2	1	2
3.	What is Micro irrigation?	L1	2	2
4.	Illustrate Net irrigation.	L2	2	2
5.	List the various kinds of dams.	L1	3	2
6.	Classify the types of earthen dams.	L2	3	2
7.	What are the methods of alignment?	L1	4	2
8.	Summarize about canal head works.	L2	4	2
9.	Enlist the need for drainage.	L1	5	2
10.	Outline the factors affecting permeability.	L2	5	2

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

Q.No	Questions	BLT	CO	Marks
11.	a i Explain in detail about water resources in India.	L1	1	8
	i List and Explain the theoretical methods to calculate the	L1	1	8
	i Evapotranspiration.			
	Or			
	b Classify the crops based on crop season, Agricultural pattern and irrigation requirements, with suitable example.	L1	1	16
12.	a i Explain the different types of flooding methods.	L2	2	8
	i Infer the advantages and disadvantages of drip irrigation system.	L2	2	8
	i			
	Or			
	b Compare surface and subsurface irrigation. Summarize the most practiced method of irrigation? What are the advantages and disadvantages of the both irrigation methods?	L2	2	16
13.	a i Discuss the types of dams and dam arches.	L2	3	8
	i Identify the forces acting on an earth dam.	L2	3	8
	i			

Or

	b	Briefly explain the design consideration for canal head regulators with neat sketch.	L2	3	16
14.	a i	Describe in detail about CADP.	L3	4	8
	i i	Organize the Warabandi system of irrigation with neat sketch.	L3	4	8
		Or			
	b	Narrate a case study of different types of water losses and their effect in water management.	L3	4	16
15.	a i	Discuss in detail about surface drainage system.	L1	5	8
	i i	Justify the importance of infiltration theory in agriculture drainage.	L1	5	8
		Or			
	b	Explain in detail about the subsidies available in government for the implementation micro irrigation in India.	L1	5	16