

THE KAVERY ENGINEERING COLLEGE*(An Autonomous Institution)***B.E/B.TECH DEGREE END SEMESTER THEORY EXAMINATIONS, APRIL/MAY 2026***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)**

<i>Q.No</i>	<i>Questions</i>	<i>BLT</i>	<i>CO</i>	<i>Marks</i>
1.	Define delta of a crop.	L1	1	2
2.	What is meant by Crop water Requirement?	L1	1	2
3.	Enumerate the method of Irrigation.	L2	2	2
4.	What is the purpose of lining the watercourses?	L1	2	2
5.	Difference between Weir and Barrage	L2	3	2
6.	Define Spillway.	L1	3	2
7.	Write the function of Canal Head Regulator.	L2	4	2
8.	What are the components of on farm developments?	L1	4	2
9.	State Darcy's Law.	L2	5	2
10.	How to calculate the Leaching Requirement?	L2	5	2

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

<i>Q.No</i>	<i>Questions</i>	<i>BLT</i>	<i>CO</i>	<i>Marks</i>
11.	a i Obtain the relationship between duty and delta and list out the factors affecting duty.	L2	1	10
	ii Write short note on development of irrigation in India	L2	1	6
	Or			
	b i What is meant by Irrigation Efficiency? Explain the various types of Irrigation Efficiencies.	L2	1	10
	ii Write in detail about Irrigation Scheduling	L2	1	6
12.	a i Write a note on drip irrigation? Identify the components of drip irrigation system	L2	2	10
	ii Write the advantages and disadvantages of Sprinkler System.	L2	2	6
	Or			
	b i Compare Kennedy's Theory and Lacey's Theory	L2	2	8
	ii Explain in detail about the components of underground pipeline irrigation system.	L2	2	8

13.	a	Explain the forces acting on a gravity dam. List the advantages and disadvantages of Gravity dam.	L2	3	16
		Or			
	b	Describe in detail about the various types of spillways and types of gates used in spillways.	L2	3	16
14.	a	What are the types of cross drainage works? Describe them briefly with sketches.	L2	4	16
		Or			
	b	Explain the techniques in On-Farm Water Management Options for Increasing Irrigation Efficiency in Command Areas	L2	4	16
15.	a	i Summarize about surface drainage system.	L2	5	8
		ii Outline the importance of infiltration theory in agriculture drainage.	L2	5	8
		Or			
	b	i Explain the mole drainage system with neat sketch.	L2	5	8
		ii Explain in detail about the management of recycled irrigation water.	L2	5	8