

THE KAVERY ENGINEERING COLLEGE*(An Autonomous Institution)***B.E/B.TECH DEGREE END SEMESTER THEORY EXAMINATIONS, NOV/DEC 2025***Seventh Semester**Civil Engineering***AI3404- Hydrology and Water Resource Engineering
(Common to Fourth Semester Agricultural 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 Infiltration indices.	L2	1	2
2.	Write the Horton's Equation.	L1	1	2
3.	Write a short note on Hydrograph.	L1	2	2
4.	What are the factors affecting runoff?	L2	2	2
5.	What is meant by NDVI analysis?	L1	3	2
6.	What is DPAP?	L1	3	2
7.	Define Reservoirs.	L2	4	2
8.	Define Spillways.	L1	4	2
9.	What is meant by Artificial recharge?	L2	5	2
10.	Write the types of Aquifers.	L1	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 Explain briefly about Double ring infiltrometer.	L2	1	16
	Or			
	b i Explain the Spatial analysis of rainfall data using Thiessen polygon.	L2	1	10
	ii Write about Rain gauge.	L2	1	6
12.	a Explain in detailed about Run off estimation using Strange's table and empirical methods.	L2	2	16
	Or			
	b i Explain about Morphological characteristics of Runoff.	L2	2	10
	ii Write a short note on unit Hydrograph.	L2	2	6

13.	a	Explain in detailed about Drought Prone Area Programme.	L2	3	16
		Or			
	b	i Write a short note on Flood management.	L2	3	8
		ii Explain briefly about Natural disasters.	L2	3	8
14.	a	i How to classify the reservoirs and explain it?	L2	4	10
		ii Write about Life of reservoirs.	L2	4	6
		Or			
	b	i How to select the site of reservoirs?	L2	4	8
		ii Write a short note on Spillways.	L2	4	8
15.	a	i Explain the properties of aquifers.	L2	5	8
		ii Explain in detailed about RWH in rural and urban areas.	L2	5	8
		Or			
	b	Explain briefly about Artificial Recharge.	L2	5	16