

THE KAVERY ENGINEERING COLLEGE
(An Autonomous Institution)

B.E/B.TECH DEGREE END SEMESTER THEORY EXAMINATIONS, NOV /DEC 2024

Fourth Semester

Agricultural Engineering

AI3402- Soil and Water Conservation 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.	List few agents involved in soil erosion.	RE	1	2
2.	Infer drop spillway.	UN	1	2
3.	Define Runoff factor.	RE	2	2
4.	Classify eroded soils.	UN	2	2
5.	Summarize the merits of contour farming.	UN	3	2
6.	Define Bench terrace with its types.	RE	3	2
7.	Extend the functions of micro catchment.	UN	4	2
8.	Interpret, at which circumstances the retaining wall will be constructed.	UN	4	2
9.	List any five factors influencing sedimentation.	RE	5	2
10.	Outline silt detention tanks.	UN	5	2

PART – B (ANSWER ALL QUESTIONS) (Marks 5*13 = 65)

<i>Q.No</i>	<i>Questions</i>	<i>BLT</i>	<i>CO</i>	<i>Marks</i>
11.	a Explain briefly about the types of water erosion. Or	UN	1	13
	b Classify various Gully Control Structures.	UN	1	13
12.	a Inspect in detail about SCS-CN method. Or	AN	2	13
	b Compare and contrast Universal Soil Loss Equation and Revised Universal Soil Loss Equation.	AN	2	13
13.	a Identify the agronomic practices of soil erosion control. Or	AP	3	13
	b Organize the steps involved in the maintenance of grassed waterway.	AP	3	13
14.	a Discover various water harvesting techniques. Or	AN	4	13
	b Examine check dam and its classification with suitable durability check.	AN	4	13

15.	a	Outline analytical method of bed load estimation.	UN	5	13
		Or			
	b	Explain in detail about various sediment control methods.	UN	5	13

*PART – C (Marks 1*15 = 15)*

<i>Q.No</i>		<i>Questions</i>	<i>BLT</i>	<i>CO</i>	<i>Marks</i>
16.	a	Interpret the problems arise due to soil erosion, with relevant case studies.	EV	1	15
		Or			
	b	Assess the factors affecting reservoir sedimentation with case studies.	EV	5	15