Register No : _____

THE KAVERY ENGINEERING COLLEGE

(An Autonomous Institution)

B.E/ B.TECH DEGREE END SEMESTER THEORY EXAMINATIONS, APRIL-MAY 2025

Fifth Semester

Agricultural Engineering

AI3501-Farm Equipment and Machinery

Regulations - 2021

Duration : 3 Hrs ***Maximum : 100 Marks***

PART – A (ANSWER ALL QUESTIONS) (Marks 10*2=20)

Q.No	*Questions*	*BLT*	*CO*	*Marks*
1.	What is farm mechanization?	L1	1	2
2.	Define field efficiency of a farm implement.	L1	1	2
3.	What is mould board plough?	L1	2	2
4.	Define tilt angle.	L1	2	2
5.	Define calibration of seed drill.	L1	3	2
6.	What is the purpose of transplanter?	L1	3	2
7.	Name the equipment used for weeding.	L2	4	2
8.	What is drift control.	L1	4	2
9.	What is the purpose of harvesting machinery?	L1	5	2
10.	What are the factors affecting thresher performance?	L1	5	2

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

Q.No		*Questions*	*BLT*	*CO*	*Marks*
11.	a	Discuss the primary tillage implements and secondary tillage implements in detail.	L3	1	16
		Or			
	b	Describe the differences between trailed and mounted farm implements, providing examples of each. Discuss how these types influence efficiency and ease of use in agricultural operations.	L3	1	16
12.	a	Explain the different types of disc ploughs and their specific applications in agriculture.	L2	2	16
		Or			
	b	Explain the construction and operation of various types of cultivators in detail.	L2	2	16

13.	a	i	Explain briefly about the furrow openers with the help of diagrams.	L2	3	8
		ii	Explain the concept of row crop planting systems.	L2	3	8
			Or			
	b	i	Explain the seed cum fertilizer drills with the help of neat diagram.	L2	3	8
		ii	Explain briefly about nursery tray machines.	L2	3	8
14.	a		Elaborate the different types of sprayers in detail with neat sketch.	L3	4	16
			Or			
	b		Elaborate the functions of dryland star, wetland cono weeder and rotary weeder with a neat sketch.	L3	4	16
15.	a		Briefly explain the types of harvesting machinery with neat diagram.	L2	5	16
			Or			
	b		Compare and contrast different types of threshers used in agriculture. How do they impact the efficiency and quality of grain separation during the harvesting process?	L2	5	16