

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

<i>Q.No</i>	<i>Questions</i>	<i>BTL</i>	<i>CO</i>	<i>Marks</i>
1.	Define Tillage.	L1	1	2
2.	How would you compare primary and secondary tillage implements?	L2	1	2
3.	List the main components of mould board plough.	L1	2	2
4.	Outline the purpose of subsoiler plough.	L2	2	2
5.	Enlist different seeding methods.	L1	3	2
6.	How planters are different than seed drills?	L2	3	2
7.	Difference between dryland and wetland weeder.	L2	4	2
8.	Recall drift control in spraying.	L1	4	2
9.	How would you define multi-crop thresher?	L1	5	2
10.	Summarize balers and its types.	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 Outline the concept of farm mechanization and discuss its main objectives.	L2	1	8
	ii Explain the role of animal drawn ploughs in farm mechanization and its working principle.	L2	1	8
	Or			
	b Summarize the forces act upon tillage implement while pulling through the soil.	L2	1	16
12.	a Describe the construction, working and adjustment of a mouldboard plough with a neat sketch.	L2	2	16
	Or			
	b Explain the construction, specifications and working of a basin lister.	L2	2	16
13.	a i Construct the methods of crop planting and their significance in agriculture.	L3	3	10
	ii How calibration of seed drill is carried out?	L3	3	6
	Or			
	b Explain the features and functions of various seed metering devices with neat sketch.	L3	3	16

14.	a	Compare the effectiveness of different rotary weeder types in controlling weeds in upland and lowland conditions.	L3	4	16
		Or			
	b	Identify the components of a knapsack sprayer and write its construction and working principle with neat sketch.	L3	4	16
15.	a	Discover the potential applications of combine harvesters and their role in modern agriculture.	L4	5	16
		Or			
	b i	Categorize the key features of baler and their importance in straw management.	L4	5	10
	ii	Contrast the benefits and drawbacks of using different adjustment and alignment methods for reapers.	L4	5	6