

THE KAVERY ENGINEERING COLLEGE*(An Autonomous Institution)***UG/PG DEGREE END SEMESTER THEORY EXAMINATIONS, APRIL-MAY 2026****Fourth Semester****Agricultural Engineering****AI3401 / UAIT24401 –TRACTORS AND ENGINE SYSTEMS****Regulations – 2021/2024****Duration : 3 Hrs****Maximum : 100 Marks****PART – A(ANSWER ALL QUESTIONS) (Marks 10*2=20)**

Q.No	Questions	BTL	CO	Marks
1.	Classify the tractors based on types of construction.	L2	1	2
2.	Show the function of piston in tractor engines	L2	1	2
3.	Tell the function of silencer in tractor.	L1	2	2
4.	List the importance of lubricating system in tractor.	L1	2	2
5.	What are the essential features of a good clutch?	L1	3	2
6.	Summarize the main difference between differential and differential lock in tractors.	L2	3	2
7.	Interpret the working principle of a hydraulic system.	L2	4	2
8.	List any four gauges used in farm tractors instruments panel.	L1	4	2
9.	Why testing and evaluation of a farm tractor is necessary.	L1	5	2
10.	Infer the working principle of hydraulic system.	L2	5	2

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

Q.No	Questions	BTL	CO	Marks
11.	a With the help of neat sketch describe the construction of engine blocks and their functions?	L2	1	16
	Or			
	b Explain the fuction of piston and crank shaft with neat sketch.	L2	1	16
12.	a Explain the sequence of operation of valve timing diagram with neat sketch?	L1	2	16
	Or			
	b Explain the lubricating system of tractors for smooth performance of tractor.	L1	2	16
13.	a Analyze the braking system for tractors with necessary sketch.	L4	3	16
	Or			
	b Describe tractors steering geometry?	L4	3	16
14.	a Summarize about traction. Interpret the different factors affecting traction?	L2	4	16
	Or			
	b Illustrate in detail the working principle and basic components of hydraulic system at tractor?	L2	4	16
15.	a Identify the components of walking type tractor? Explain its working principle?	L3	5	16
	Or			
	b Develop a schematic diagram of a power tiller with operator seat attachments?	L3	5	16

