

Register No : _____

THE KAVERY ENGINEERING COLLEGE
(An Autonomous Institution)

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

Sixth Semester

Agricultural Engineering

AI3601 Post- Harvest Technology

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: Post harvest technology	RE	1	2
2.	Define: Equilibrium moisture content	RE	1	2
3.	Define: Psychrometry	RE	2	2
4.	Define: Drying	RE	2	2
5.	What are the uses of magnetic separator?	RE	3	2
6.	What are the uses of colour sorter?	RE	3	2
7.	State the principle of pneumatic conveyer	RE	4	2
8.	What are the advantages of mechanical groundnut decorticator?	RE	4	2
9.	What are the advantages rice polishers?	RE	5	2
10.	Define: Parboiling of paddy	RE	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 i Explain the principles and operation of mechanical threshers with neat sketch.	UN	1	7
	ii Describe the post harvest losses of cereals in India.	UN	1	6
	Or			
	b i Explain the post harvest losses of pulses and oilseeds in India.	UN	1	7
12.	ii Explain the direct and indirect methods of measuring the moisture content of biological materials with neat sketch?	UN	1	6
	a i Explain the uses of psychrometric chart in food industries?	UN	2	5
	ii Discuss about the thin layer and deep bed drying of biological materials with neat sketch.	UN	2	8
	Or			
	b i Define: Hot air drying? Explain the methods of hot air flow in drying chamber with neat sketch.	UN	2	3
	ii Discuss about the operation and maintenance of different types of dryers with neat sketch.	UN	2	10

13.	a i	Explain about the spiral separator with neat sketch.	UN	3	7
	ii	Discuss about the effectiveness of separation and performance index of cylinder separator.	UN	3	6
Or					
	b i	Explain about the inclined belt separator with neat sketch .	UN	3	6
	ii	Discuss about the principles of cleaning and grading machineries of crops.	UN	3	7
14.	a i	Explain about the principle and operations of maize sheller	UN	4	5
	ii	Explain about the screw conveyor with neat sketch	UN	4	8
Or					
	b i	Explain about the bucket elevators with neat sketch	UN	4	8
	ii	Explain about the principle and operations of castor sheller	UN	4	5
15.	a i	Explain about the merits and demerits of parboiling and methods.	UN	5	7
	ii	Explain about the different types of rice polishers with neat sketch.	UN	5	6
Or					
	b i	Explain about the millet processing with neat sketch.	UN	5	7
	ii	Explain about the wheat milling process with neat sketch.	UN	5	6

*PART – C (Marks 1*15 = 15)*

<i>Q.No</i>		<i>Questions</i>	<i>BLT</i>	<i>CO</i>	<i>Marks</i>
16.	a i	Discuss the importance of post harvest technology of biological materials in India.	UN		8
	ii	Explain about the belt conveyor with neat sketch.	AP		7
Or					
	b i	Explain about the modern rice mill with neat sketch.	AP		8
	ii	Explain about the oil seed processing with neat sketch.	AP		7