

**MAHARASHTRA AGRICULTURAL UNIVERSITIES EXAMINATION BOARD**  
**SEMESTER END THEORY EXAMINATION**

**B.Tech. (Food Technology)**

Semester : I (New)	[ICAR - Sixth Deans' Committee Syllabus]	Acad. Year : 2025-26
Course No. : FE-111	Title : Post-Harvest Engineering	
Credit Hrs. : 3(2+1)	Day, Date : Wednesday, 11.02.2026	
Time : 10:00 to 12:00 hrs.		Total Marks : 40

Note: Draw neat diagram wherever necessary

**SECTION 'A' : Questions with Descriptive Long Answers (Any 4)**

		Marks
Q.1	Enlist different cleaning methods and explain about wet cleaning method.	6
Q.2	Describe in brief about belt conveyors and roller conveyors used in material handling.	6
Q.3	Define Material handling and enlist the equipments used with its scope in food industry.	6
Q.4	a) Write in brief about grading of fruits and vegetables.	3
	b) Write in brief about sorting of fruits and vegetables.	3
Q.5	a) Describe in brief about enzymatic browning.	3
	b) Discuss in detail about external factors which contributes post-harvest losses of food commodities.	3
Q.6	a) Describe the decorticating process for groundnut.	3
	b) Discuss in detail about internal factors which contributes post-harvest losses of food commodities.	3

**SECTION 'B' : Questions with Descriptive Short Answers (Any 4)**

Q.7	Define Peeling and state the different methods of peeling used for fruits and vegetables.	2
Q.8	Write in brief about screw conveyors.	2
Q.9	Write in short about density of food materials.	2
Q.10	Enlist the key aspects of post-harvest technology of fruits and vegetables.	2
Q.11	Write down any two advantages and disadvantages of bucket elevator.	2

**SECTION 'C' : Objective-type Compulsory Questions**

Q.12	Define the following terms:	4
	1) Water activity	
	2) Pre-cooling	
	3) De-cortication	
	4) Porosity	

(P.T.O.)

Q.13 Fill in the blanks:

- 1) \_\_\_\_\_ is defined as the resistance of a fluid to flow.
- 2) \_\_\_\_\_ is the heat released or absorbed by a chemical substance or a thermodynamic system during a change of state that occurs without change in temperature.
- 3) Fluids that follow Newton's law of viscosity are called \_\_\_\_\_.
- 4) In \_\_\_\_\_ cropping pattern, two or more crops are grown simultaneously intermingled without any row pattern.
- 5) \_\_\_\_\_ refers to the decrease in edible food mass or nutritional value of food that was originally intended for human consumption.
- 6) Post-harvest processing can \_\_\_\_\_ the losses.
- 7) The \_\_\_\_\_ enzyme is responsible for enzymatic browning in fruits.
- 8) Machines that used in food industries to clean and sort food commodities using air currents, are called \_\_\_\_\_.

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