

Total No. of printed pages = 4

19/5th Sem/DFET503



2021

FOOD STORAGE AND PACKAGING

Full Marks – 100

Time – Three hours

The figures in the margin indicate full marks for the questions.

Answer any *five* questions.

1. (a) What is shelf life of food ?

Why deaeration of fruit juice is required ?

How aseptic packaging of food is performed ?

Why low temperature storage facilitates food shelf life ?

Mention name of one active packaging system.

10

[Turn over

(b) Match Column A with Column B : 10

Column-A	Column-B
(i) Tea bag packaging	(a) Packaging of carbonated soft drink
(ii) (MAP+Low temperature+ Low aw+ bacteriocin)	(b) Paper/perforated pouch with powered iron/VitC
(iii) PET	(c) Hurdle Technology
(iv) Oxygen scavenger in intelligent packaging	(d) Packaging of horticulture produce
(v) MAP	(e) Porous wet-strength paper

2. (a) What are the principal causes of food spoilage? 5
- (b) Write the factors controlling shelf life of food. 5
- (c) Write examples of perishable, semi-perishable and non-perishable food. 6
- (d) Write about packaging of meat. 4

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3. Briefly write about the following packaging materials : 20

- (i) LDPE,
- (ii) HDPC,
- (iii) PP,
- (iv) EVA,
- (v) EVOH,
- (vi) EAA
- (vii) Polystyrene,
- (viii) HIPS,
- (ix) PVOH,
- (x) PVdC.



4. (a) Write deteriorative reactions in food in post harvest period. 10
- (b) What is MAP? Write about packaging of horticulture products. 10
5. (a) MAP associated with low temperature storage and hence mention other hurdle technology to improve shelf life of food. 6
- (b) What is intelligent packaging? 4
- (c) What is aseptic packaging? How it is tested? 5+5=10

6. (a) Write about packaging of dairy product :
10
- (i) UHT milk
 - (ii) Yogurt
 - (iii) Butter
 - (iv) Cheese
 - (v) Milk powder.
- (b) Write about packaging of beverages coffee, tea, fruit juice, carbonated soft drink, beer.
10
7. (a) Write about packaging of breakfast cereals, bread, biscuit. 12
- (b) Why active MAP is not active packaging ?
8

