

Total No. of printed pages = 5

FPT-504/FS&P/5th Sem/2017/N

FOOD STORAGE AND PACKAGING

Full Marks – 70

Time – Three hours

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

GENERAL INSTRUCTIONS

1. Illustrate your answers with suitable sketches and examples wherever necessary.
2. Make suitable assumption(s) wherever, whenever applicable.
3. Preferably, write the answers with sequential order.

PART – A

1. Fill up the gaps in the following : $1 \times 10 = 10$
 - (a) Name of a food borne pathogen _____.
 - (b) Shelf life of food is _____.
 - (c) For controlling food spoilage, the factors to take care are _____.

[Turn over

- (d) Polyphenol oxidase is _____.
- (e) Refrigerated storage of food improves shelf life because _____.
- (f) Storage parameters for grains is _____.
- (g) Storage parameter for fresh fruits and vegetables are temperature _____ and relative humidity _____.
- (h) Packaging pouch of pasteurized milk is made of _____.
- (i) PET is _____.
- (j) Suitable packaging laminate for milk powder is _____.

2. Answer the following short questions : 1×8=8

- (a) Which chemicals are used for sterilization of packaging material ?
- (b) What do you mean by mechanical integrity of package ?
- (c) Why integrity of aseptic package is tested ?

- (d) What packaging laminate is used for UHT milk ?
- (e) What packaging material is used for fermented dairy product ?
- (f) What is staling of coffee ?
- (g) What packaging laminate is suitable for breakfast cereals ?
- (h) Why vacuum packaging is useful for cheese and panir ?

3. Match the columns :

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Column - A	Column - B
Sensory quality	Respiratory pattern
Food poisoning	Storage temperature violation
Nonenzymatic browning	Carbonated soft drink package
Climacteric	Fumigation
Decay control	Lipid oxidation
PET bottle	Maillard reaction
Fat bloom on biscuit	<i>Staphylococcus aureus</i>

PART – B

4. Answer any *three* questions : $10 \times 3 = 30$
- (a) How packaging helps in storage and transportation of food? Justify your answer with examples. Which foods are usually vacuum packaged and why?
 - (b) Briefly write about packaging of beverages like coffee, tea, fruit juice, carbonated soft drink, specifically mentioning the name of packaging material used.
 - (c) Why MAP with refrigerated storage helps in better shelf life of food? Write some important and required characteristics of a suitable packaging material.
 - (d) Developing suitable packaging laminates for breakfast cereals, snack, biscuit etc. are guided by which factors? Briefly write about those important parameters.

5. Write short notes on any *two* : $7.5 + 7.5 = 15$

- (a) Active packaging system
- (b) Packaging of horticulture products
- (c) Packaging of flesh food
- (d) Deteriorative reactions in food.