

Total No. of printed pages = 5

FPT-301/ITFPT/3rd Sem/2017/M

**INTRODUCTION TO FOOD PROCESSING
TECHNOLOGY**

Full Marks – 70

Pass Marks – 28

Time – Three hours

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

Answer any *five* questions.

1. (i) Fill in the blanks : 1×5=5
- (a) Oligosaccharides contain _____ to
_____ monosaccharide units
linked by a glycosidic group.
- (b) Caramalization is a _____
reaction.
- (c) Starch is a _____.

[Turn over

- (d) _____ one straight chain monocarboxylic acids with an even number of carbon atoms.
- (e) Retinol is a _____ vitamin.
- (ii) Write some properties of sugars. 5
- (iii) What are the role of fats and oils in biological systems ? 4
2. (i) What are the classes of proteins depending on their functional role in biological systems ? 5
- (ii) Describe any one commercial heat preservation method. 4
- (iii) Choose the correct answer : $1 \times 5 = 5$
- (a) *Monosaccharides / polysaccharides* are soluble in water.
- (b) Night blindness is caused due to deficiency of Vitamin A / Vitamin D.
- (c) Lactic acid bacteria ferment sugars to *lactic acid / acetic acid*.

(d) *saccharomyces* species are the most widely used yeasts / bacteria.

(e) Fermented foods are advantageous as they give / does not give appetizing flavour and aroma.

3. (i) What are the basic principles of food preservation ? 3

(ii) What are the different factors influencing the microbial activity ? 8

(iii) Give some examples of foods where yeasts are used. 3

4. (i) Write short notes : $4 \times 3.5 = 14$

(a) Food spoilage

(b) Food fermentation

(c) Drying of food materials

(d) Vitamins.

5. (i) Match the followings :

1×5=5

(a) Falling rate period	(i) Endogenous enzyme
(b) Peroxidase	(ii) Milk
(c) Pasteurization	(iii) Drying rate curve
(d) Spice	(iv) Clove
(e) Salt	(v) Preservative

(ii) What do you mean by blanching ?

Write how is blanching carried for fruits and vegetables.

1+3=4

(iii) Fill in the blanks :

1×5=5

(a) Glucose + _____ = Lactose

(b) Glucose + fructose = _____.

(c) Bromening of sugars in presence of _____ occurs in a sequence of reaction and called Maillard reaction.

(d) Butter is a _____ in _____ emulsion.

6. (i) What is a starch ? What are their properties ?
1+4=5

(ii) What are fatty acids ? What are saturated
unsaturated and essential fatty acids ? Explain
with proper example. 1+3+3=7

(iii) Name two animal fat. 2

7. (i) Write short notes : 3×3=9

(a) Fluidized bed driver

(b) Tunnel driver

(c) Tray drier

(ii) Write the general requirements of a food
packaging material. 5