Q.1. Define Food Science, Food Processing and Food Microbiology. Discuss the inter-relationship between them.

(10)

Q.2. What is starch in connection to amylose and amylopectin? Explain the factors affecting starch gel formation.

(10)

Q.3. Discuss the functional properties of proteins (i.e. Viscosity, Foam ability, Gelation, Emulsification).

OR

Explain briefly the types and properties of colloids.

(10)

Q.4. Define Enzymatic Browning. How will you prevent enzymatic browning reactions?

(2+8=10)

Q.5. Give brief description of the following:
(a) Dextrinisation       (b) Maillard reaction

OR

What are fats and oils? Differentiate between them.

(5+5=10)

(2+8=10)

Q.6. Explain the sensory evaluation of food quality.

OR

Explain the classification of food flavours.

(10)


(2+6+2=10)
Q.8. Define/explain the following with examples (any five):
   (a) Syneresis
   (b) Pasteurisation
   (c) Denaturation of proteins
   (d) Shortening agent
   (e) Winterisation
   (f) Food rheology
   (g) Proximate analysis of foods

   (5x2=10)

Q.9. Give reasons for the following (any five):
   (a) Weeping of jelly
   (b) It is necessary to add extra flour to brown sauce
   (c) Dried fruits and vegetables on storage get browned
   (d) It is not desirable to add rice and sugar to milk or water in making rice payasam
   (e) Danger zone temperature for food products are 5 to 63º C.
   (f) Enzymatic browning can be stopped by dipping the cut vegetables and fruits in water.

   (5x2=10)

Q.10. Fill in the blanks:
   (a) The continuous phase in milk is _________.
   (b) _________ is a protein present in wheat flour.
   (c) _________ is formed in maillard reaction.
   (d) The unpleasant odour of fat results in _________.
   (e) Flavour reversion is a phenomenon usually encountered in _________.
   (f) _________ is the natural pigment in green vegetables.
   (g) LTH stands for _________.
   (h) _________ is a crystalloid.
   (i) Polyphenolase is _________ which causes enzymatic browning.
   (j) _________ is a proteolytic enzyme present in papaya.

   (10x1=10)

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