Q.1. (a) Define Food Science.  
(b) Define flavour and classify it.  

(5+5=10)

Q.2. Discuss the effects of dry and moist heat on starch.  
OR  
What are the factors affecting gelatinization of starch? List the uses of carbohydrates in food preparation.  

(10)

Q.3. What do you mean by rancidity of fats and oils? What measures will you take to prevent rancidity, while storing fats and oils?  

(10)

Q.4. Write briefly on the various functional properties of protein.  
OR  
Discuss the uses of fats and oils in food preparation.  

(10)

Q.5. Explain the five sensory evaluation methods of food.  
OR  
What do you mean by food processing? Discuss the various objectives of food processing.  

(10)


(2+6+2=10)
Q.7. Differentiate between a solution, colloidal dispersion and a suspension.  

OR

What are the application of colloid systems in food preparation?

(10)

Q.8. Give brief description of the following:
(a) Denaturation of proteins
(b) Classification of carbohydrates

(5+5=10)

Q.9. Differentiate between (any five):
(a) Essential and non-essential amino acids
(b) Difference and descriptive test
(c) Leavening and shortening agent
(d) Enzymatic and non-enzymatic browning
(e) Hydrogenation and polymerization
(f) Inversion and caramelization

(5x2=10)

Q.10. Fill in the blanks with the appropriate word:
(a) Milk is an example of ________ emulsions (water in oil / oil in water).
(b) ________ is the enzyme responsible for undesirable browning in food (phenol oxidase, amylase).
(c) Heating of dry starch is known as ________ (caramelization/ dextrinization).
(d) The continuous phase is sol is ________ (sol / liquid).
(e) Triangle test is a ________ test (discrimination test / descriptive test).
(f) Iodine number is the measure of the extent of ________ fatty acids present in fats and oils (saturated / unsaturated).
(g) Hydrolysis of sugar to glucose and fructose in presence of acid is an example of ________ (inversion / caramalization).
(h) The gum and free fatty acids present in fats are removed by ________ (neutralization / bleaching).
(i) ________ is an example of class 1 preservative (salt / sodium benzoate).
(j) ________ is the bond which unites two amino acids in proteins (glycosidic/ peptide).

(10x1=10)

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