Avinashilingam Institute for Home Science and Higher Education for Women
(Deemed to be University), Coimbatore-641 043

Master's Degree Examination – November 2018
Semester - I

Class : I PG **Time: 3 hours**
Major : Food Science and Nutrition **Max. Marks: 60**

17MFNC05 Chemistry of Foods –I

Part A **10 x 1/2 = 5**

Choose the correct answer

1. Percentage of water in dairy products is approximately _____ percent.
   a. 5 b. 75% c. 3 d. 35%
2. Colloids do not obey which of the following _____
   a. Tyndall b. Brownian c. colligative d. Lambert law
3. Which of the following is a type of candy _____
   a. Toffee b. Tofu c. Bhong d. chewing gum
4. Crystal formation in foods is based on _____
   a. sugar concentration b. Color c. Flavor d. all the above
5. Acidic milk results in a phenomenon called _____
   a. acidosis b. blue milk c. churning d. curdling
6. Effect of soaking reduces _____ content
   a. antioxidant b. sugar c. tannin d. protein
7. Hydrolysis of fats is catalysed by _____
   a. Lipase b. amylase c. catalase d. peroxidase
8. Hydrogenation reaction can be catalysed by _____
   a. water b. nickel c. magnesium d. hydrolase
9. Enzymatic browning is caused by _____
   a. reductase b. aromatase c. brominase d. polyphenol oxidase
10. Largest source of pectin is _____
    a. cherries b. citrus peels c. tamarind d. apple

Part B

5 x 4 = 20

Answer ALL questions

Each answer should not exceed 200 words or one page

11.a. Explain the terms denaturation and coagulation.

(Or)

11.b. Distinguish the types of water in food and write one property of each type.

12.a. Enumerate the factors that affect gelatinization.

(Or)

12.b. Interpret your understanding on non starch polysaccharides (NSP).

13.a. Discuss the formation of gluten.

(Or)

13.b. Assess the changes that would occur in egg due to high temperature.

14.a. Analyse what happens during winterization.

(Or)

14.b. Assemble your thoughts to derive at the phenomenon rancidity.

15.a. Estimate ways to prevent enzymatic browning reactions in foods.

(Or)

15.b. Describe the chemistry of vegetable gums.

Part C

5 x 7 = 35

Answer ALL questions

Each answer should not exceed 600 words or three pages

16.a. Examine what is oxidation of foods with an example. Also define the term.

(Or)

16.b. Compose a note on water activity of foods.

17.a. Examine the outcome of a non-enzymatic reaction with any example.

(Or)

17.b. Collect information on food gel formation.

18.a. Evaluate any 7 properties of amino acids.

(Or)

18.b. Revise the nutritional importance of proteins towards our body.

19.a. Sketch what happen during the decomposition of the triglycerides and explain .

(Or)

19.b. Compose a note on the physical properties of fats and oils.

20.a. Design the role of food additive in food industries.

(Or)

20.b. Prepare a list of 5 active principles found in spiced and condiments and its uses.

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