Avinashilingam Institute for Home Science and Higher Education for Women

(Deemed to be University), Coimbatore-641 043

Bachelor's Degree Semester Examination, November 2018

I Semester

Major: Food Science and Nutrition **Time: 3 hours**
Class: I B.Sc. **Max.Marks: 100**

18BFNC03 Food Chemistry

PART A **10x1=10**

Circle the correct answer

1. _____ is a homogeneous mixture of two or more substances

a. True Solution b. colloids c. solution d. solvent

2. _____ is not an example of colloids.

a. butter b. milk c. jelly d. water

3. Cystallization occurs only if the solution is _____

a. supersaturated b. saturated c. turbid d. pure

4. _____ is associated with browning of fruits

a. citrates b. orthoquinones c. acetone d. bromine

5. _____ enzyme is produced during fermentation of pulses

a. Acetyl coenzyme b. lipoxygenase c. cytase d. carboxylase

6. Scorching of milk is due to the reaction _____

a. quinones b. starch c. lipids d. lactose

7. Rancidity is due to --------- of fats.

a. reduction b. oxidation c. amylation d. acetylation

8. The smoking temperature of coconut oil is--------

a. 178 b. 138 c. 188 d. 140

9. --------bioactive compound is present in cloves.

a. phenol b. protein c. eugenol d. betanin

10. Curcuminoids are present in ----------

a. tamarind b. turmeric c. carrot d. ginger

Part B

Answer the following **5 x 6 = 30**

Answer should not exceed 400 words or two pages

11.a. Explain gels and foams with examples.

Or

11.b. Describe about water activity in foods.

12.a. Write note on Non-Enzymatic browning with examples.

Or

12.b. How does acid and alkali affect the nature of milk proteins? Explain.

13.a. Illustrate the changes that occur in egg proteins on heating.

Or

13.b. Discuss on the effect of acid and alkali on vegetables.

14.a. Examine the chemical properties of fats.

Or

14.b. Describe the process of hydrogenation.

15.a. Explain Enzymatic browning in fruits and vegetables.

Or

15.b. Sketch on the different types of plant pigments.

Part C **5 x 12=60**

Answer the following

Answer should not exceed 800 words or four pages

16.a. How will you determine the moisture content of foods?

Or

16.b. Enumerate on the following: dispersions, colloids and sols.

17.a. Explain the stages of sugar cookery.

Or

17.b. Discuss the factors affecting gelatinization and strength of the gel.

18.a. Detail on the effect of germination and fermentation of pulse proteins.

Or

18.b. Describe the changes that occur in the chemistry of milk proteins on heating.

19.a. Write in detail on the factors affecting absorption of fat in foods.

Or

19.b. Enumerate on the changes in fats and oils on heating process.

20.a. Explain the properties and active principles of spices and condiments.

Or

20.b. Discuss the effect of acids, alkali and heat on fat soluble pigments.

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