

PSG COLLEGE OF ARTS & SCIENCE  
(AUTONOMOUS)  
BSc DEGREE EXAMINATION MAY 2019  
(First Semester)

Branch - NUTRITION, FOOD SERVICE MANAGEMENT & DIETETICS

**CHEMISTRY OF FOODS**

Time: Three Hours

Maximum: 75 Marks

**SECTION-A (10 Marks)**

Answer ALL questions

ALL questions carry EQUAL marks (10x1 = 10)

- 1 Water exists in tomato juice is as  
(i) free water (ii) bound water  
(iii) absorbed water (iv) droplets
- 2 This acid of apple slows down bacterial spoilage.  
(i) Citric acid (ii) tartaric acid  
(iii) malic acid (iv) lactic acid
- 3 It may be used as a food additive in mixing of hot chocolate mix.  
(i) mustard powder (ii) lethium  
(iii) cream (iv) egg white
- The increased \_\_\_\_\_ reduces breakage of the interfacial film in foam,  
(i) Swelling power (ii) Solubility  
(iii) Flow (iv) Viscosity
- Lactose appears to increase \_\_\_\_\_ retention in children,  
(i) Sodium (ii) Calcium  
(iii) Pottassium (iv) Phosphorus
- This sugar prevents excessive crystallization of sucrose.  
(i) maltose (ii) cellobiose  
(iii) furanose (iv) invert sugar
- \_\_\_\_\_ & \_\_\_\_\_ are constituents of some proteins.  
(i) copper & zine (ii) Zine & sodium  
(iii) sodim & copper (iv) Sodium of phosphorous
- It contains a positively charged group and a negatively charged group within the molecule.  
(i) Isoelectric point (ii) Zwilterion  
(iii) Dipeptide (iv) Steric effect
- The flavour of cooked vegetables is influenced by the sence of \_\_\_\_\_ compounds.  
(i) betalines (ii) acids  
(iii) sulphur (iv) aluminum
- 10 Tannins are important because it possess astringency which influences flavor to  
(i) Cola (ii) Wine  
(iii) Milk (iv) Cherries

**SECTION - B (25 Marks)**

Answer ALL questions

ALL questions carry EQUAL Marks (5 x 5 = 25)

- 11 a Brief on non-nutrient components of cereals.

12 a State the functions of emulsifying agents.

OR

b Write the definition of colloids and gel.

13 a Write a short note on Rancidity.

OR

b What are the uses of Pectic substances in foods?

14 a Draw a primary and secondary structure of protein.

OR

b Discuss on protein denaturation.

15 a Describe the changes of carotene in tomato during cooking.

OR

b Explain non enzymic browning reaction with suitable example.

**SECTION -C (40 Marks)**

Answer **ALL** questions

**ALL** questions carry **EQUAL** Marks ( 5 x 8 = 40)

16 a Summarise the factors affecting the composition of foods.

OR

b What are the changes do you observe during boiling of water?

17 a List the properties of Colloids.

OR

b Elucidate the types of surface films in emulsion.

18 a Bring out the classification of Carbohydrates.

OR'

b Explain the physical properties of fats.

19 a Write a note on Gelatin

(i) chemistry

(ii) Manufacture

(4+4)

OR

b Egg proteins are complete proteins - explain it.

20 a Describe on Animal Pigments.

OR

b Elaborate on natural flavoring components in spices.

**Z-Z-Z**

**END**