

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION DECEMBER 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

(10 x 1 = 10)

- 1 Number of hydrogen atoms water can form with other water molecule
(i) 4 (ii) 6
(iii) 2 (iv) 5
- 2 Addition of solutes decrease vapour pressure and thus boiling point _____
(i) increases (ii) decreases
(iii) is constant (iv) is 100° C
- 3 Milk is an example of
(i) W/o emulsion (ii) o/w emulsion
(iii) sol (iv) foam
- 4 Identify the emulsifying agents
(i) lecithin (ii) carboxy methyl cellulose
(iii) sorbitan esters (iv) All the above
- 5 Identify the seed gums
(i) Locust bean gum (ii) Guar gum
(iii) xanthan gum (iv) Both (i) and (ii)
- 6 Glyceraldehyde is an example of
(i) Triose (ii) Pentose
(iii) Tetrose (iv) Hexose
- 7 Most widely used test for measuring the extent of lipid per oxidation is
(i) TBA value (ii) iodine value
(iii) saponification value (iv) None
- 8 Proteins which on hydrolysis yield only amino acids and no other organic or inorganic hydrolytic products are called
(i) Simple proteins (ii) Conjugated proteins
(iii) Incomplete proteins (iv) complete proteins
- 9 Identify the Synthetic flavours used in food industry
(i) Ethyldecadienoate (ii) Ethylvanillin
(iii) Isoamyl acetate (iv) All the above
- 10 Choose the water soluble pigments
(i) carotenoids (ii) anthocyanins
(iii) flavanoids (iv) Both (ii) and (iii)

Cont...

SECTION - B (35 Marks)

Answer **ALL** Questions

ALL Questions Carry **EQUAL** Marks

(5 x 7 = 35)

- 11 a Discuss the factors affecting composition of food.
OR
b How to determine the moisture content of food ?
- 12 a Define the terms : Colloids,sol,gel,emulsion and foam
OR
b Discuss the factors affecting gel information.
- 13 a Write the classification of carbohydrate with suitable examples
OR
b Discuss the properities and uses of pectins.
- 14 a Discuss the physical properties of fat.
OR
b Describe the structure of proteins.
- 15 a Differentiate and characterise natural and synthetic colours.
OR
b Elaborate on natural flavouring components in spices and condiments.

SECTION - C (30 Marks)

Answer any **THREE** Questions

ALL Questions Carry **EQUAL** Marks

(3 x 10 = 30)

- 16 Elaborate on the characteristics of water in its solid, liquid and gaseous state.
- 17 Describe the properties of colloids.
- 18 Elaborate on the starch and its components, structure and effect of acids and enzymes.
- 19 Explain the hydrolytic and oxidative rancidity.
- 20 Describe enzymatic browning reactions in food and steps to prevent it.

Z-Z-Z

END