

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION DECEMBER 2022
(First Semester)

Branch – NUTRITION, FOOD SERVICE MANAGEMENT AND DIETETICS

FOOD CHEMISTRY / CHEMISTRY OF FOODS

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(5 x 1 = 5)

- 1 Moisture content and Water activity is/are
(i) Qualitative and Quantitative properties respectively
(ii) Quantitative and Qualitative properties respectively
(iii) Both Qualitative (iv) Both Quantitative
- 2 Emulsions stability enhancers are known as _____
(i) Antioxidants (ii) Surface active agents
(iii) Free radicals (iv) Fat replacers
- 3 Modified starches are stable _____
(i) Protein polymers (ii) Fat polymers
(iii) carbohydrate polymers (iv) Maltodextrin
- 4 Collagen is a protein found in _____
(i) Cartilage (ii) Connective tissue
(iii) Tendons (iv) All the above
- 5 A substance intentionally added that preserves flavour and improves taste is called
(i) Food additive (ii) Food adulterant
(iii) Food contaminant (iv) Food material

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks

(5 x 3 = 15)

- 6 a Outline the factors affecting composition of foods.
OR
b Bring out the changes observed during boiling of water.
- 7 a Explain the properties of colloids.
OR
b Describe the factors affecting gel formation.
- 8 a Explain the importance of Saponification number of Iodine number.
OR
b Show the uses of substances in foods.
- 9 a How do you classify proteins based on functional properties?
OR
b Show the chemistry of Gelatin.
- 10 a Enumerate on animal pigments.
OR
b State the natural flavouring components present in spices.

Cont...

SECTION -C (30 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks (5 x 6 = 30)

- 11 a Enumerate hydrogen ion concentration in food.
OR
b Analyse the water activity of foods.
- 12 a Differentiate between egg foams and dairy foams.
OR
b Point out the functions of emulsifying agent.
- 13 a Discuss on classification of carbohydrates.
OR
b Highlight the types of rancidity.
- 14 a Narrate the browning reaction in foods and steps to prevent browning reactions.
OR
b Identify the factors affecting denaturation of protein.
- 15 a Compare anthocyanins with anthoxanthins.
OR
b Elucidate on texture profile of foods.

Z-Z-Z

END