

PSG COLLEGE OF ARTS & SCIENCE  
(AUTONOMOUS)

BSc DEGREE EXAMINATION MAY 2022  
(First Semester)

Branch – NUTRITION, FOOD SERVICE MANAGEMENT AND DIETETICS

**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. Water exists as ice in-----  
(a) below 0 °C (b) above 50 °C  
(c) above 100 °C (d) above 110 °C
2. Gel formation can be improved by adding -----  
(a) salt (b) chloride  
(c) oils (d) solvent
3. The degree of unsaturation of lipids can be measured as  
(a) Saponification number (b) Reichert Meissel number  
(c) Iodine number (d) Polenske number
4. \_\_\_\_\_ is the process of alteration in physical structure of protein in an irreversible way.  
(a) coagulation (b) denaturation  
(c) precipitation (d) deamination
5. The chlorophyll content of vegetables reacts with acids forms-----  
(a) starch (b) anthoxanthin  
(c) cellulose (d) pheophytin

**SECTION - B (15 Marks)**

Answer ALL questions

ALL questions carry EQUAL Marks (5 x 3 = 15)

11. a Infer on food chemistry  
OR  
b what is hydrogen ion concentration in foods?
12. a Outline the properties of colloids  
OR  
b List out the functions of emulsifying agent
13. a write a note on glycogen  
OR  
b List out the classification of fat
14. a How gelatin used in food production?  
OR  
b Mention the structure of amino acid

Cont...

15 a What are anthocyanin?

OR

b Difference between natural and synthetic flavor

**SECTION -C (30 Marks)**

Answer ALL questions

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

16 a. Illustrate the factor affecting the food composition

OR

b. Describe the changes observed in boiling water and list the factors affecting it

17 a. Summarize the factors affecting gel formation

OR

b. Discuss on foam formation and stabilization

18 a. Illustrate the rancidity and its types

OR

b. Analyze the classification of carbohydrate

19 a. Explain the structure of protein

OR

b. Classify the properties of protein

20 a Enumerate the steps to prevent enzymatic browning

OR

b Justify how GRAS recognized as safe.

Z-Z-Z

END