

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION MAY 2018
(Fourth Semester)

Branch – NUTRITION, FOOD SERVICE MANAGEMENT & DIETETICS

BIOCHEMISTRY

Time : Three Hours

Maximum : 75 Marks

SECTION-A (20 Marks)

Answer ALL questions

ALL questions carry EQUAL marks (10 x 2 = 20)

- 1 Define the role of glyceraldehyde 3 phosphate in glycolysis.
- 2 Define D-fructose.
- 3 What is lipoprotein?
- 4 What is oxidative phosphorylation?
- 5 List the major sources of protein.
- 6 How much urea is secreted daily in an adult woman?
- 7 Name any two saturated fatty acids.
- 8 Draw the structure of purine.
- 9 Give any two functions of enzymes.
- 10 Mention co-enzymic role of B vitamins in carbohydrate metabolism.

SECTION - B (25 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks (5 x 5 = 25)

- 11 a Write short note on classification of polysaccharides.
OR
b Explain HMP shunt pathway.
- 12 a Describe β - oxidation of saturated fatty acids.
OR
b Explain the factors responsible for the enzyme action.
- 13 a Write short note about the transamination process of amino acids.
OR
b Give the properties of amino acids.
- 14 a Brief on catabolism process of hemoglobin.
OR
b Give the functions of nucleic acid.
- 15 a Explain oxidation & reduction reactions with examples.
OR
b Write a note on paper chromatography.

SECTION - C (30 Marks)

Answer any THREE Questions

ALL Questions Carry EQUAL Marks (3 x 10 = 30)

- 16 Describe the interrelationship of protein and fat metabolism.
- 17 Explain the biosynthesis and catabolism of cholesterol.
- 18 Summarise on urea cycle and transportation of ammonia.
- 19 Draw the structure of nucleotide and explain it.
- 20 What are the factors influencing rate of enzyme action?