

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
BSc DEGREE EXAMINATION DECEMBER 2018
(Fourth Semester)

Branch - NUTRITION, FOOD SERVICE MANAGEMENT AND 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 What are heteropolysaccharides?
- 2 Write the prime function of glycogen.
- 3 What is phrynoderma?
- 4 Define oxidative phosphorylation.
- 5 Mention any two transport proteins.
- 6 How urea cycle is regulated?
- 7 List the sources of nucleic acids.
- 8 What is the normal concentration of Hemoglobin in blood in male & female?
- 9 Give any two examples metallo enzymes
- 10 . State the two phases of chromatography.

SECTION - B (25 Marks)

Answer ALL Questions

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

- 11 a Write the importance of NADPH in HMP shunt.
OR
b Give the reducing properties of monosaccharides.
- 12 a Write an energetics of palmitic acid oxidation.
OR
b What are free fatty acids? Write its fate.
- 13 a Explain general structure of aminoacids.
OR
b Discuss on non oxidative deamination.
- 14 a What are the major bases in nucleic acids?
OR
b Brief on ATP[→]ADP cycle.
- 15 a How do you determine k_m value of an enzyme?
OR
b Write the techniques of paper chromatography.

SECTION - C (30 Marks)

Answer any THREE Questions

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

- 16 Enumerate glycogenolysis with neat flow chart.
- 17 How cholesterol is synthesised in human system?
- 18 Summarize protein biosynthesis.
- 19 Give an account on catabolism of hemoglobin.
- 20 Write the role of carnitine in fatty acid transport.