

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION MAY 2019
(Fourth Semester)

Branch- ZOOLOGY

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 monosaccharide with examples.
- 2 What is reducing sugar?. Give examples.
- 3 What are saturated fatty acids? Give examples.
- 4 Write the structure of lecithin.
- 5 Draw the peptide linkage and explain how it is formed.
- 6 What do you mean by optimum temperature of enzyme?
- 7 Define nucleotide with examples.
- 8 Define beer lamferf slaw.
- 9 Define p - oxidation.
- 10 What is deamination?

SECTION - B (25 Marks)

Answer ALL Questions

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

- 11 a Brief on the occurrence and structure of cellulose.
OR
b Discuss about the osazone formation with carbohydrates.
- 12 a Write about the structure and biological function of cephalin.
OR
b Define buffer and explain the biological role of buffers.
- 13 a Write a note on the secondary structure of proteins.
OR
b Enumerate the biological functions of enzyme.
- 14 a Explain the biological role of nucleic acids.
OR
b Write brief notes on principle and application of chromatography techniques.
- 15a What is transamination? Explain with suitable examples.
OR
b Explain the TCA cycle in details.

SECTION - C 130 Marks!

Answer any THREE Questions

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

- 16 How are carbohydrate classified? Give suitable examples for each category.
- 17 Discuss the structure and biological significance of water.
- 18 Enumerate the functions that affect enzyme activity.
- 19 Explain the structure of DNA.
- 20 Define glycolysis and explain the glycolytic pathway with energetics.