PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

**BSc DEGREE EXAMINATION MAY 2017**
(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 Give the "Fischer" and "Haworth's" formula for glucose.
2 What are polysaccharides? Give example.
3 Define "triglycerides".
4 Explain in brief about biological buffer with two examples.
5 What is isoelectric pH of protein?
6 Define coenzymes with example.
7 What are nucleotides?
8 . Give the basic "principles of colorimetry".
9 Explain, Why TCA cycle is amphibolic in nature.
10 What is deamination?

SECTION - B (25 Marksi
Answer ALL Questions
ALL Questions Carry EQUAL Marks (5 x 5 = 25)

11 a Write a note on the classification and structure of biologically important monosaccharides.

OR

b Write an account on structure and reactions of disaccharides.

12 a Give the structure and biological function of cholesterol.

OR

b Discuss the significance of Biological buffers.

13 a Writes notes on the following:
(i) Denaturation of proteins (ii) Cofactors in enzymes reactions.

OR

b Write a note on the factors affecting enzymes reactions. „

14 a What is chromatography? Explain the types and principle of "chromatographic technique"?

OR

b State an account on "classification of nucleic acids".

15 a Describe "p - oxidation of fatty acids" with its energetics.

OR

b Discuss on the following:
(1) Transamination (2) Decarboxylation

SECTION - C (30 Marks!
Answer any THREE Questions
ALL Questions Carry EQUAL Marks (3 x 10 = 30)

16 Explain the biological significance and classification of polysaccharides.
17 Describe the Classification of lipids.
18 Discuss the various levels of organisation of structure of proteins.
19 Elaborate on "Watson and crick" model of DNA.
20 Describe the Kreb's - Hensleit cycle involved in the elimination of ammonia.