PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
BSc DEGREE EXAMINATION DECEMBER 2017
(Second 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 (1 0 x 2 = 20)

1   Define the term gluconeogenesis.
2   List any two function of carbohydrate.
3   Define the term triglycerides.
4   What is phospholipids?
5   Write any two factors which effect the denature of protein.
6   Give any two chemical properties of amino acids.
7   Write the structure of pyrimidine.
8   List any two functions of nucleic acids.
9   Define the term lineweaver -burke plot.
10   Name any two major co-enzymes present in carbohydrate metabolisms.

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

11   a Write a short note o the properties of glycogen.
                              OR
     b Explain the interrelationship between protein and carbohydrate.

12   a Describe the composition of lipids.
                              OR
     b Explain the structure of lecithin and cephalin.

13   a Write short note about the 'r' group reactions.
                              OR
     b Write down the process of decarboxylation.

14   **a** Describe the structure of RNA.
                              OR
     b Write down the properties of DNA.

15 a   Give the classification of enzymes.
                              OR
     b Write short note on Michaelis - menton equation.

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

16   Describe in detail about the TCA cycle.

17   Explain in detail about the respiratory chain of oxidative phosphorylation.

18   Explain protein biosynthesis with schematic representation.

19   Write in detail about the synthesis and catabolism of heamoglobin.

20   Discuss the detoxification reaction from hydrolysis and conjugation.

Z-Z-Z   END