PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION DECEMBER 2017
(Fifth Semester)

Branch - **BIOCHEMISTRY**

METABOLISM II

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 essential poly unsaturated fatty acid.
2 Write the inhibitors of fatty acid synthesis.
3 Give the structure of sphinogomyelin.
4 What is calcitriol?
5 Write the catabolism of inactive amino acid.
6 Explain Dopamine.
7 Give the structure of NAD^+.
8 Write the inhibitors in purine metabolism.
9 What are polyamines?
10 Define Cy^l P_{45}o-

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

11a Explain the (3 - oxidation of fatty acid.
OR
b Give an account on cytosolic fatty acid biosynthesis.

12 a Write in detail about the role of phospholipase.
OR
b Explain briefly about Eicosanoid metabolism.

13 a What is deamination? Explain.
OR
b Explain the catabolism of tyrosine and tryptophan.

14 a Explain the importance of purine nucleoside cycle.
OR
b Give an account on pyrimidine biosynthesis.

15 a Explain the biosynthesis of carnitine.
OR
b Write about the biosynthesis of Glutathione.

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

16 Explain in detail about oxidation of unsaturated fatty acid.
17 Describe the biosynthesis and degradation of phospholipids.
18 Give the pathway, energetics and compartmentat i on of urea cycle.
19 Write the biosynthesis of nucleotide coenzymes.
20 Explain about the phase II reaction in xenobiotic metabolism.

Z-Z-Z END