

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
BSc DEGREE EXAMINATION DECEMBER 2019
(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 What is a - oxidation?
2 Name the enzymes of FAS complex.
3 Draw the structure of cholesterol.
4 Name the enzymes involved in phospholipid metabolism.
CMH Define : Transamination.
What are the end products of tryptophan catabolism?
Give the list of purine biosynthesis inhibitors.
8 What is salvage pathway?
9 Define: Xenobiotics.
10 Draw the structure of porphyrins.

SECTION - B (25 Marks)

Answer **ALL** Questions

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

- 11 a How unsaturated fatty acids are synthesized?
OR
b What is carnitine shuttle? Explain with neat diagram.
12 a How Gangliosides are synthesized?
OR
b Explain the formation of calcitrol.
13 a Write the deamination reaction of amino acids.
OR
b Give the catabolic reaction of glycine.
14 a How purines are synthesized by denovo pathway?
OR
b Write the reactions of pyrimidine catabolism.
15 a How glutathione is biosynthesized?
OR
b Write an account on biological methylation.

SECTION - C (30 Marks)

Answer any **THREE** Questions

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

- 16 Elaborate (3-oxidation and if s energetics.
17 Write an essay on cholesterologenesis.
18 Explain in detail about Urea cycle.
19 Explain the denovo synthesis of pyrimidines.
20 Write a detailed account on the phase I reactions of xenobiotics