

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION MAY 2017 ■ ' c v " ' ' 1
(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 Name the end products of the β -oxidation of odd and even number of 'C' atom containing fatty acids.
- 2 Write the enzymes of FAS complex.
- 3 Give the role of phospholipase A₂.
- 4 What is suicide enzyme?
- 5 Name the thyroid hormones produced from tyrosine.
- 6 Define : Glycinuria.
- 7 Write the names of any 2 inhibitors of purine synthesis.
- 8 Define : Gout.
- 9 Define : conjugation.
- 10 What is methylation?

SECTION - B (25 Marks)

Answer **ALL** Questions

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

- 11 a Explain FAS complex with neat diagram.
OR
b Explain : α -oxidation.
- 12 a Write about the catabolism of Gangliosides.
OR
b How bile acids are formed?
- 13 a Explain the reactions of non-oxidative deamination.
OR
b Explain the reactions of transamination.
- 14 a Give the salvage pathway of purine biosynthesis.
OR
b Give the salvage pathway of pyrimidine biosynthesis.
- 15 a Explain the role of cytochrome P₄₅₀ in xenobiotics metabolism.
OR
b How carnitine produced?

SECTION - C (30 Marks)

Answer any **THREE** Questions

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

- 16 Write the reactions of β -oxidation and give brief notes.
- 17 Give the metabolism of Eicosanoids with diagram.
- 18 Explain the pathway and energetics of urea cycle.
- 19 Explain pyrimidine biosynthesis.
- 20 How glutathione and creatine are produced?