

Code No. 3131

FACULTY OF SCIENCE

B.Sc. (CBCS) IV – Semester Examination, May / June 2019

Subject : Biochemistry

(DSC) Paper – IV
Intermediary Metabolism

Max. Marks : 80

Time : 3 hours

Part – A (5 x 4 = 20 Marks)
(Short Answer Type)**Answer any Five of the following questions.**

- 1 Decarboxylation
- 2 Biosynthesis of creatine
- 3 Anaplerotic reactions
- 4 Pasteur effect
- 5 Elongation of fatty acids in mitochondria and microsomes
- 6 Degradation of triacylglycerol
- 7 Thymidylate synthase
- 8 Lesch-Nyhan syndrome

Part – B (4 x 15 = 60 Marks)
(Essay Answer Type)**Answer ALL questions from the following :**

- 9 a) Explain the catabolism of branched chain amino acids.

OR

- b) Give an account of inborn errors of aromatic and branched chain amino acid metabolism.

- 10 a) Explain the reactions of TCA cycle and add a note on its regulation.

OR

- b) Explain in detail about Calvin cycle and distinguish between C₃ and C₄ plants.

- 11 a) Give an account of de novo synthesis of fatty acids.

OR

- b) Explain the biosynthesis of triacylglycerol and lecithin.

- 12 a) Explain the reactions of biosynthesis of pyrimidine nucleotides and add a note on its regulation.

OR

- b) Give an account of metabolism of heme.
