

FACULTY OF SCIENCE**B.Sc. IV-Semester (CBCS) Examination, May / June 2018****Subject: Biochemistry****Paper – IV
Intermediary Metabolism****Time: 3 Hours****Max.Marks: 80****PART – A (5x4 = 20 Marks)
[Short Answer Type]****Note: Answer any five of the following questions.**

- 1 Decarboxylation of amino acids
- ✓ 2 Maple syrup urine disease
- ✓ 3 Pasteur effect
- ✓ 4 Anaplerotic reactions
- ✓ 5 Regulation of cholesterol synthesis
- 6 Elongation of fatty acids in mitochondria
- ✓ 7 Gout
- 8 Catabolism of pyrimidines

**PART – B (4x15 = 60 Marks)
[Essay Answer Type]****Note: Answer all questions from the following.**

- ✓ 9 a) Describe the reactions of urea cycle. Add a note on its regulation.
OR
- b) Write in detail about:
 - i) Metabolism of aspartic acid
 - ii) In born errors of aromatic amino acids
- 10 a) Write in detail about glycogenolysis.
OR
- b) What is photo synthesis? Discuss the various light reactions in detail.
- 11 a) Describe the stages in the biosynthesis of cholesterol.
OR
- b) Write briefly about β – oxidation and its regulation.
- 12 a) discuss the denovo pathway for purine biosynthesis.
OR
- b) Write briefly about:
 - i) Lesch-Nyhan's syndrome
 - ii) Catabolism of purine.
