

Roll No.

U03B15

Y-2201

B. Sc. (Part II) EXAMINATION, 2015

BIOCHEMISTRY

Paper Second

(Intermediary Metabolism)

Time : Three Hours]

[Maximum Marks : 50

Note : Attempt all the *five* questions. *One* question from each Unit is compulsory. All questions carry equal marks.

Unit—I

1. Discuss the reactions and energetics of T. C. A. cycle.

Or

Write short notes on the following :

- (a) Radioactive isotopes in study of metabolism .
- (b) Glycogenolysis

Unit—II

2. Explain “sequence of electron carries site of ATP production and inhibitors of electron transport chain” in mitochondria.

Or

Discuss basic concept of mechanism of oxidative phosphorylation in mitochondria.

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Unit—III

3. Explain the following :
- (a) Transport of fatty acids in mitochondria
 - (b) β -oxidation of fatty acids

Or

Write short notes on the following :

- (a) Biosynthesis of triglycerides
- (b) Biosynthesis of phospholipids

Unit—IV

4. Explain “transamination”, “oxidative deamination” and “decarboxylation” of amino acids.

Or

Discuss different steps of urea cycle, enzymes involved and its biological significance.

Unit—V

5. Discuss the biosynthesis of pyrimidine nucleotides and its regulation.

Or

Write short notes on the following :

- (a) Degradation of purine nucleotides
- (b) Production of bile pigments