

Exam. Code : 107404

Subject Code : 1676

B.Sc. (Bio Technology) 4th Sem. (Batch 2020-23)

BIOCHEMISTRY-IV

(Metabolism of Proteins And Nucleric Acid)

Paper-BTL253

Time Allowed—3 Hours] [Maximum Marks—40

Note :— Attempt **FIVE** questions in all, selecting at least **ONE** question from each section. The **fifth** question may be attempted from any section. All questions carry equal marks.

SECTION—A

1. What are glucogenic amino acids ? Discuss the degradation of any two essential glucogenic amino acids. 8
2. (a) Discuss the role of transamination reactions in amino acid catabolism.
(b) Write a note on Urea Cycle and its importance. 4+4

SECTION—B

3. Discuss biosynthesis and regulation of essential aromatic amino acids. 8

4. (a) Write a note on regulation of amino acid biosynthesis by feedback inhibition.
- (b) What are essential amino acids ? Write the name of starting material for the biosynthesis of any eight essential amino acids. 4+4

SECTION—C

5. Write a note on biosynthesis of purines. 8
6. Describe :-
- (a) Biosynthesis of pyrimidines
- (b) Regulations of nucleotide biosynthesis. 4+4

SECTION—D

7. Discuss degradation of purines to various nitrogenous excretory products. 8
8. (a) Explain salvage pathway
- (b) Write a note on degradation of pyrimidines. 4+4