Roll No. | | | | | | | | | | | | **Total No. of Pages : 02**

Total No. of Questions : 09

B.Sc. (OTT) (Sem.–5)

BASIC BIOCHEMISTRY

Subject Code : BSOT-508-19

M.Code : 92815

Date of Examination : 27-01-2023

Time : 3 Hrs. **Max. Marks : 60**

INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.**
3. **SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.**

SECTION-A

1. Write briefly :

a) What do you mean by rare amino acid?

b) Define epimers.

c) Differentiate reducing and non-reducing sugars with examples.

d) Define dissociation constant.

e) Define Sphingophospholipids.

f) Define Essential fatty acids.

g) Give biomedical importance of steroid hormones.

h) What are fibrous proteins?

i) Define catabolism.

j) Write down the function of rRNA.

SECTION-B

2. Discuss in detail what Henderson-Hasselbeck equation is and what its significance is.

3. Summarize the mechanism of ETC in energy capture.

4. Write a detailed note on metabolic breakdown of nucleic acids.

5. Discuss the occurrence, biomedical importance, daily requirements and deficiency of water-soluble vitamins.

6. Explain the different steps involved in P-oxidation.

SECTION-C

7. Discuss the individual steps involved in citric acid cycle along with significant and net production.

8. Compare the reactions of gluconeogenesis and glycolysis in detail.

9. Explain the biosynthesis and degradation of purines. Add a note on regulation of nucleotide biosynthesis.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.