

D 52853

(Pages : 2)

Name.....

Reg. No.....

**FIRST SEMESTER M.Sc. DEGREE (REGULAR/SUPPLEMENTARY)
EXAMINATION, NOVEMBER 2023**

(CBCSS)

Zoology

ZOL 1C 01—BIOCHEMISTRY AND CYTOGENETICS

(2019 Admission onwards)

Time : Three Hours

Maximum : 30 Weightage

I. Answer any *four* of the following. Short Answer Type Questions. Weightage 2 :

- 1 Define monosaccharides and draw the structure of glucose.
- 2 Why are amino acids called as amphoteric in nature ?
- 3 Define Enthalpy.
- 4 Define Decarboxylation.
- 5 Draw the structure of fluid mosaic model of plasma membrane.
- 6 Define Necrosis.
- 7 Define Integrins.

(4 × 2 = 8 weightage)

II. Answer any *four* of the following. Short Essay Type Questions. Weightage : 3 :

- 8 Give a brief account on the characters and forms of peptide bond.
- 9 Explain briefly the functions of Prostaglandins.
- 10 Give a note on mechanism of enzyme action.
- 11 Give a brief account on the biosynthesis of tryptophan.
- 12 Give a short notes on components present in the fluid mosaic model of plasma membrane.
- 13 Give brief account on structure and functions of peroxisome.
- 14 Give a note on steps involved in apoptosis.

(4 × 3 = 12 weightage)

Turn over

III. Answer any *two* of the following. Long Essay Type Questions. Weightage 5

- 15 Briefly explain the biological roles of lipids.
- 16 Explain the steps involved in krebs cycle with outline.
- 17 Describe in detail about the structure and functions of endoplasmic reticulum.
- 18 Explain in detail about the mechanism of signal transduction via GPCR and

(2 × 5 = 10)