

Reg. No. :	
Name :	***************************************

I Semester M.Sc. Degree (CBSS – Reg./Supple./Imp.) Examination, October 2021 (2018 Admission Onwards) ZOOLOGY ZOO1C02 – Biological Chemistry

Time: 3 Hours

Max. Marks: 60

- Answer any two of the following.
 - 1) Briefly explain the biosynthesis of fatty acids.
 - Explain the electron transport chain in mitochondria and the mechanism of oxidative phosphorylation.
 - 3) Give an account on TCA cycle with its energetics.
 - 4) Give an account on classification of carbohydrates.

(2×12=24)

- Answer any two of the following.
 - 5) Differentiate deamination and transamination.
 - 6) Briefly describe the beta pleated structure of proteins.
 - 7) Briefly describe the factors affecting enzyme activity.
 - 8) Give an account on different forms of DNA.

 $(2 \times 8 = 16)$

- III. Answer any four of the following.
 - 9) Differentiate between competitive and non-competitive inhibitors.
 - 10) Write an account on urea cycle.
 - 11) Write notes on Pentose Phosphate Pathway.
 - 12) Comment on standard free energy concept.
 - 13) Write notes on phospholipids and its functions.
 - 14) Write an account on the tertiary structure of proteins.

 $(4 \times 5 = 20)$