|--|--|

Reg. No.:....

Name: .....



# III Semester B.Sc. Degree (CBCSS – Sup./Imp.) Examination, November 2020 (2014 – '18 Admns.)

# GENERAL COURSE IN MICROBIOLOGY 3A11 MCB: Biochemistry for Microbiology

Time: 3 Hours

0.

Max. Marks: 40

#### SECTION - A

Answer all the four questions:

- 1. Acidic amino acids are \_\_\_\_\_ and \_\_\_\_
- 2. The pH at which the net charge of protein is zero is known as
- 3. Lactose is formed by the condensation of \_\_\_\_\_ and \_\_\_\_
- 4. In animal cells, fatty acid oxidation takes place in \_\_\_\_\_

 $(4 \times 1 = 4)$ 

#### SECTION - B

Answer very briefly on any seven questions out of ten:

- 5. Cholesterol.
- 6. Chirality of amino acids.
- 7. NAG and NAM.
- 8. Redox potential of compounds.
- 9. Cytochrome P450.
- 10. Henderson Hasselbalch equation.
- Phosphodiester bonds.
- 12. Prosthetic group.
- 13. Keto sugars with example.
- 14. K<sub>M</sub> and its significance.

 $(7 \times 2 = 14)$ 

# K20U 1295



# SECTION - C

Answer any four questions out of six briefly:

- 15. Structure of Immunoglobulin G.
- 16. Effect of drugs on vital organs.
- 17.  $\beta$ -oxidation of fatty acids.
- 18. Non covalent interactions in stabilizing protein structure.
- 19. Urea cycle.
- 20. Properties of enzymes.

 $(4 \times 3 = 12)$ 

# SECTION - D

Answer any two questions out of four:

- 21. Write a detailed account on the classification of amino acids.
- 22. Explain the structural and reserve polysaccharides in organisms.
- 23. Embden-Myerhof-Parnas Pathway and its significance.
- 24. Write an account on the structure and types of nucleotides in the cells. ( $2 \times 5 = 10$ )