



K22U 3441

Reg. No. : .....

Name : .....

I Semester B.Sc. Degree (CBCSS – O.B.E. – Regular/Supplementary/  
Improvement) Examination, November 2022

(2019 Admission Onwards)

COMPLEMENTARY ELECTIVE COURSE IN PHYSIOLOGY

1C01 PLY : Biological Chemistry

Time : 3 Hours

Max. Marks : 32

I. Essay questions. Answer **any two**. (2×6=12)

- 1) Explain the enzyme Nomenclature and classification.
- 2) Describe the classification of lipids.
- 3) Comment on the biological properties of water and its significance.
- 4) With illustration explain the different structures of proteins.

II. Short essay questions. Answer **any two**. (2×3=6)

- 5) Discuss polysaccharides.
- 6) Describe the colloidal nature of protoplasm.
- 7) Explain the interrelationship between carbohydrates, proteins and lipid metabolism.

III. Short answer questions. Answer **any six**. (6×2=12)

- 8) What are Zymogens ? Give one example.
- 9) Comment on laws of thermodynamics.
- 10) Differentiate between standard and non-standard amino acids.
- 11) Explain the lock and key hypothesis.
- 12) What are buffers ? Give example.
- 13) Enlist the major factors affecting BMI.
- 14) Comment on disaccharides.
- 15) Explain the end product inhibition.

P.T.O.



IV. Multiple choice questions. Answer **all**.

(4×0.5=2)

16) Which of the following is an Isoenzyme ?

- a) NAD
- b) Ribose
- c) Glucokinase
- d) Arginine

17) Pick out an unsaturated fatty acid.

- a) Oleic acid
- b) Acetic acid
- c) Palmitic acid
- d) Stearic acid

18) Identify a nonpolar molecule.

- a)  $\text{NH}_3$
- b)  $\text{CHCl}_3$
- c)  $\text{CO}$
- d)  $\text{CO}_2$

19) Pick out a Ketose sugar.

- a) Arabinose
- b) Galactose
- c) Xylulose
- d) Erythrose

