



K20U 3342

Reg. No. :

Name :

I Semester B.Sc. Degree CBCSS (OBE) Reg./Sup./Imp.
Examination, November 2020
(2019 Admn. Onwards)
COMPLEMENTARY ELECTIVE COURSE IN PHYSIOLOGY
1C01PLY : Biological Chemistry

Time : 3 Hours

Max. Marks : 32

I. Essay Questions. Answer **any two**.

(2×6=12)

- 1) Explain the role of liver in Fat metabolism and Protein metabolism.
- 2) Describe the factors affecting enzyme activity.
- 3) What are Monosaccharides ? Give its classification with suitable example.
- 4) Describe the classification of lipids in detail.

II. Short Essay Questions. Answer **any two**.

(2×3=6)

- 5) Write a note on storage polysaccharides with two examples.
- 6) Describe the Tertiary and Quaternary structure of proteins.
- 7) Describe the Second law of thermodynamics. Explain the concept of Entropy.

III. Short Answer Questions. Answer **any six**.

(6×2=12)

- 8) Explain covalent bond and its important characteristics.
- 9) What are buffers ? Give an example.
- 10) What is meant by non-competitive inhibition of enzyme action ? Give an example.
- 11) What is a Zymogen ? Give an example.

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- 12) What are peptides ? Classify.
- 13) What are Steroids ? Give an example.
- 14) What is Cooperativity of an enzyme ?
- 15) What is BMR ? What are the factors affecting it ?

IV. Multiple Choice Questions. Answer **all**.

(4×0.5=2)

- 16) Which of the following is an example of Tetroses ?
 - a) Glyceraldehyde
 - b) Erythrose
 - c) Ribose
 - d) Glucose
 - 17) Hydrolysis reactions are catalysed by enzymes called
 - a) Oxidoreductase
 - b) Ligase
 - c) Hydrolase
 - d) Lyase
 - 18) The extent of randomness or disorder in a system is called
 - a) Enthalpy
 - b) Entropy
 - c) Free energy
 - d) Activation energy
 - 19) Which of the following is a structural polysaccharide ?
 - a) Starch
 - b) Glycogen
 - c) Chitin
 - d) Fructose
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