



Roll No:

--	--	--	--	--	--

Total Number of Pages : 1

AR-19

M.SC

M.Sc 1ST SEMESTER REGULAR EXAMINATIONS, NOV/DEC 2019-20

LSPC101-BIOPHYSICS AND BIOCHEMISTRY

Time: 3 Hours

Max Marks: 80

The figures in the right hand margin indicate marks.

SECTION A

Q.1 Answer any four of the following:

[4 x 4 =16]

- a Ionic bond
- b Cyclic photophosphorylation
- c Biological importance of pH
- d Ramachandran plot
- e Diffusion
- f Classification of enzymes

OR

2. Answer all questions from the following

[8 x 2 =16]

- a Lyophobic colloids
- b Structure of amino acid
- c Peptidoglycans
- d Cellulose
- e Ultrafiltration
- f Dipole moment
- g Peptide bond
- h Tyndall effect

SECTION-B

3. Answer all Questions:

[4 x16 =64]

- a What are colloids? Describe the properties of colloids.

OR

- b Explain about different intermolecular forces present in biological system.

4.

- a Write the structure and composition of plasma membrane. Explain how transport occur across this membrane?

OR

- b Describe how the principles of thermodynamics work in biological system?

5.

- a What are enzymes? Describe the mechanism of enzyme action.

OR

- b Describe the double helical structure of DNA.

6.

- a Give an account of fatty acid oxidation.

OR

- b Explain the mechanism of oxidative phosphorylation.