

(20518)

Roll No.

B. Sc. (Micro.) -I Year

3489

B. Sc (Microbiology) Examination, May 2018

Biophysics

(B-106)

Time : Three Hours]

[Maximum Marks : 50

Note : Attempt any five questions. All questions carry equal marks.

1. What is Chirality ? Explain the applications of Chirality in biomolecules. 2+8

2. Write short notes on the following : 5+5
(a) Relationship between Physics and Biology
(b) Properties of open system.

3. What are enzymes ? Explain enzyme substrate interactions. 2+8

4. Write short notes on the following : 5+5
(a) First law of thermodynamics
(b) Conformational properties of enzymes.

5. What is photoreception ? What are photoreceptor proteins ? Discuss the different types of photoreceptors. 2+2+6

6. What are biological compartments ? Discuss the use of electricity as a potential signal in various biological compartments. 3+7

7. Write short notes on the following : 5+5
(a) Enzyme kinetics
(b) Electrical properties of biological compartments.

8. Explain biomechanics and discuss the biomechanics of locomotory organs in vertebrates. 10

9. Explain chemiosmotic coupling with special reference to photosynthesis. 10

10. Explain the mechanism of energy transfer during respiration. 10