

(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

(2)

✓ 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