

(20518)

Roll No. ....

(2)

B. Sc. (Biotech.)-I Year

**NS-3456**

**B. Sc. (Biotechnology) Examination, May 2018**

**BIOPHYSICS**

**(B-102)**

**(New)**

*Time : Three Hours]*

*[Maximum Marks : 50*

**Note :** Answer any *Five* questions. All questions carry equal marks.

1. What are high energy molecules ? Discuss their structure and functions. 10

2. Discuss the primary, secondary and tertiary structure of proteins and role of bonds and forces involved. 10

3. Write short notes on the following : 5×2=10

(a) Defects of vision and corrections

(b) Water as a universal solvent.

4. Discuss the internal structure and biophysics of statophono receptors. 10

5. Write short notes on any two of the following : 5×2=10

(a) Super coiling of DNA

(b) Lambert-Beer's law

(c) Nucleotides.

6. Write short notes on the following : 5×2=10

(a) Colorimetry

(b) Steroid hormone.

7. Write short notes on the following : 5×2=10

(a) Isomerism

(b) Laws of thermodynamics.

(3)

8. Discuss the light dependent reaction of photosynthesis in plants and microbes. 10

9. Write short notes on the following : 5×2=10

- (a) Membrane potential
- (b) Charismatic hypothesis.

10. Write short notes on any two of the following : 5×2=10

- (a) Antigen-Antibody reaction
- (b) Biophysical methods
- (c) Visual cycle.