A (Printed Pages 3)

(20622) Roll No. .....

B.Sc.(Bio-Tech.)-I Year

NS-3456 (N)

B.Sc. (Biotechnology)

Examination, June-2022

BIOPHYSICS

(B-102)

(New)

(B.Sc. Biotech)

Time : Three Hours] *[Maximum Marks : 50*

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

1. Give biophysical principle of surface tension and diffusion. 10

2. Explain the physics of followings 2×5

   (a) Biophysics of water

   (b) Ultrafiltration

P.T.O.

3. What is 1st and IInd law of thermodynamics and explain significant of it in biophysics? 10

4. Explain the followings: 2×5

   (a) pKa

   (b) Creatine phosphate

5. What are the stages of photosynthesis in plants. Explain the strategies of light reception in microbes. 10

6. Briefly explain stereoisomerism and chirality. 10

7. How the physics explain the formation of image in eye, explain with diagram. 10

8. Give short notes on: 2x5

   (a) Membrane potential (neurotransmission)

   (b) Electrical property of membrane

9. Explain the biomechanics of striated muscle. 10

10. Give brief notes on the following 10

(a) Synapse

(b) Signal transduction