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(20623)

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

**NS-3456**

B.Sc. (Biotechnology) Examination, June-2023

**BIOPHYSICS**

(B-102)

(B.Sc. Biotech)

Time : 3 Hours]

[Maximum Marks : 50

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

1. Explain the scope and methods of Biophysics ?  
Give biophysical principle of dialyses. 10
2. Explain the following : 2×5  
(a) Diffusion  
(b) Ultrafiltration
3. How the concept of thermodynamics helps to explain energy in biological system. Briefly explain living body as a thermodynamics system. 10
4. Write short note on the following : 2×5  
(a) Ph  
(b) ATP

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5. Explain the light associated phenomenon of optical isomerism and mutarotation. 10
6. Briefly explain about the biophysics of vision, hearing sense of balance and rotation. 10
7. How the process of molecular transport happens across all membrane. Explain membrane potential of biological membrane. 10
8. Give notes on the following : 2×5  
(a) Electrical property of membrane  
(b) Dialysis
9. How does the cardiovascular system work in the human body? 10
10. What is process of signal transduction in living system? 10

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