



QP CODE: 24026904



Reg No :

Name :

**B.Sc DEGREE (CBCS) REGULAR / IMPROVEMENT / REAPPEARANCE
EXAMINATIONS, OCTOBER 2024**

Third Semester

B.Sc Bioinformatics Model III

COMPLEMENTARY COURSE - BI3CMT05 - BIOPHYSICS

2017 Admission Onwards

A9C73A78

Time: 3 Hours

Max. Marks : 80

Part A

*Answer any **ten** questions.*

*Each question carries **2** marks.*

1. How is enthalpy used in real life?
2. What are 4 ways to increase the rate of a chemical reaction?
3. What is Rate Law of chemical reaction?
4. Define buffers.
5. What is difference between solution and true solution?
6. Define molarity.
7. What is adsorption?
8. What is absorption?
9. State Fick's law of diffusion.
10. What is the importance of viscosity?
11. Define dialysis.
12. What is N in Bragg's law?

(10×2=20)

Part B

*Answer any **six** questions.*

*Each question carries **5** marks.*





13. What are the laws of thermodynamics?
14. Sketch Carnot cycle.
15. How is pH measured?
16. Point the types of colloids.
17. Explain the properties of emulsions.
18. Biological applications of osmosis.
19. The force with which the surface molecules are held together is called? Explain.
20. Factors affecting surface tension.
21. Depict GM counter.

(6×5=30)

Part C

*Answer any **two** questions.*

*Each question carries **15** marks.*

22. Write a detailed note on Solutions, their properties, types and classifications.
23. Describe briefly on active transport and facilitated diffusion.
24. Comment briefly on radioactivity, types of radioactivity and its biological importance.
25. Explain the application of radioisotopes in science.

(2×15=30)

