

QP CODE: 203008

Reg. No:

**Second B. Pharm (Ayurveda) Degree Regular/Supplementary
Examinations March 2023**

Physical Pharmacy

Time: 3 Hours

Total Marks: 100

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*

Essays:

(2x10=20)

1. Explain electric properties of colloids.
2. Define adsorption isotherm, Explain Langmuir adsorption Isotherm in detail.

Answer briefly:

(10x5=50)

3. Solubilisation.
4. Pharmaceutical applications of Polymers.
5. Electric double layer.
6. Explain the working principle of Ostwald viscometer with diagram.
7. Stability problems of Emulsion.
8. Microencapsulation.
9. Any one method to determine surface tension.
10. Explain the influence of temperature on rate of reaction.
11. Freundlich adsorption isotherm.
12. Difference between Lyophilic and Lyophobic colloids.

Short notes:

(10x3=30)

13. Raoult's law.
14. Spreading coefficient.
15. Advantages of Emulsion.
16. Arrhenius equation and Collision theory.
17. Sedimentation parameters of Suspension.
18. Methods to determine order of reaction.
19. Micellar solubilisation.
20. Cone and plate viscometer.
21. Complex reactions.
22. Dalton's law for vapour pressure.
