

**Second B.Pharm (Ayurveda) Degree Regular/Supplementary
Examinations April 2021**

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 viscosity. Discuss factors affecting viscosity and falling sphere viscometer.
2. Explain optical properties of colloids

Answer briefly:**(10x5=50)**

3. Nernst's partition law.
4. Noyes Whitney equation.
5. Two methods for preparation of lyophobic colloids.
6. Explain Freundlich adsorption isotherm.
7. Creaming of emulsion.
8. Andersen pipette
9. Describe any two methods of determining the energy of activation
10. Define adsorption. Explain Difference between physical adsorption and chemical adsorption.
11. Discuss factors affecting solubility of gases in liquid.
12. Discuss zero order reaction

Short notes:**(10x3=30)**

13. RHLB. Mention the disadvantages of HLB system.
14. Dalton's law for vapor pressure.
15. Arrhenius equation and its application.
16. Plug flow and their remedies.
17. Enlist methods of determination of surface tension and write any one in detail
18. Explain thickening properties
19. Define contact angle and mention its applications.
20. Discuss methods to stabilize drugs from hydrolytic degradation.
21. Kinetics of drug transportation.
22. Suspending agents
