

QP CODE: 203008

Reg. No:

**Second B.Pharm (Ayurveda) Degree Regular/Supplementary
Examinations November 2019**

Physical Pharmacy

Time: 3 Hours

Total Marks: 100

- Answer all questions.

Essays:

(2x10=20)

1. Explain kinetic properties of colloids.
2. Explain physical stability of suspension

Answer briefly:

(10x5=50)

3. Explain detergency.
4. Describe type - I dissolution apparatus.
5. Define bulk density. How is it determined
6. Capillary rise method for surface tension.
7. Explain first order of reaction.
8. Discuss air permeability method for determination of surface area.
9. Give the working principle of Ostwald viscometer with a labeled diagram.
10. What are the causes for the instability of emulsions
11. Explain term colloids. Classify the colloids.
12. Explain steady state of diffusion

Short notes:

(10x3=30)

13. How do you select a viscometer to study the rheology of fluids
14. Microencapsulation
15. Gel
16. Plastic flow of fluids.
17. HLB Scale
18. Yield value and Bingham bodies.
19. Define: viscosity, angle of repose, surface tension.
20. Henry's law
21. Define emulsion. Mention two advantages of emulsions with suitable examples
22. Mention the Hixson-Crowell cube root law and explain its importance in pharmacy
