

QP CODE: 203008

Reg. No:

**Second B.Pharm (Ayurveda) Degree Supplementary Examinations
April 2018
Physical Pharmacy**

Time: 3 Hours

Total Marks: 100

- Answer all questions.

Essays:

(2x10=20)

1. Define colloids. Explain their kinetic properties
2. Explain methods to determine surface area of powder particles

Answer briefly:

(10x5=50)

3. Explain factors affecting solubility of gases in liquids
4. Any one method to determine surface tension
5. Theory of emulsification
6. Explain Non Newtonian type of flow in liquids
7. Explain Fick's law of diffusion
8. Physical stability problems in emulsion
9. Coulter counter method
10. Pharmaceutical application of microencapsulation technique
11. Factors affecting dissolution
12. Optical properties of colloids

Short notes:

(10x3=30)

13. Pharmaceutical application of surfactants
14. Factors affecting rate of reactions
15. Thixotropy
16. Equations for rate constant and half-life of first order reaction
17. Discuss various graphs to express particle size distribution of powders
18. Micellar solubilization
19. Wetting agents
20. Lyophilic colloids
21. Distribution law
22. List out the polymers used as thickening agents in pharmaceutical industry
