

QP CODE: 203008

Reg. No:

**Second B.Pharm (Ayurveda) Degree Supplementary Examinations,
April 2017
Physical Pharmacy**

Time: 3 Hours

Total Marks: 100

- Answer all questions.

Essays:

(2x10=20)

1. Define adsorption isotherms. Explain Langmuir adsorption isotherm. What are its limitations
2. Discuss the stability problems in emulsions and suggest methods to overcome the same.

Answer briefly:

(10x5=50)

3. Define specific surface area of particles and explain any one method to determine the surface area of particles.
4. What are association colloids and mention their application
5. Explain various Non Newtonian types of flow in fluids
6. Differentiate between flocculated and deflocculated suspensions
7. HLB scale and applications of surfactants
8. State Fick's law of diffusion
9. Microencapsulation technique
10. Explain any one method to determine particle size
11. The principle and working of cup and bob viscometer
12. What are the factors affecting rate of chemical reactions

Short notes:

(10x3=30)

13. Kinetic properties of colloids
14. Sedimentation parameters of suspensions
15. List out factors affecting solubility of gases in liquids
16. Derive the kinetic equations for first order chemical reaction
17. Explain factors affecting dissolution
18. Explain the pharmaceutical and biomedical applications of polymers
19. Emulsifying agents
20. Discuss a method for determining order of a reaction
21. Stalagmometer
22. Distribution law and its applications
