QP Code: 322006 Reg. No......

Third Semester B.Pharm Degree Regular/Supplementary Examinations January 2020

Physical Pharmaceutics I

(2017 Scheme)

Time: 3 Hours Max. Marks: 75

- Answer all questions
- Draw diagrams wherever necessary

Essays (2x10=20)

- 1. List the derived properties of powder. How they are evaluated.
- Explain and discuss the solubility method and pH titration methods of analysis of complexation.

Short Notes (7x5=35)

- 3. What are the different methods for adjustment of isotonicity.
- 4. What is protein binding. Write its influence on drug activity.
- 5. Importance and uses of buffers in pharmaceutical and biological systems.
- 6. Aerosols and its applications in pharmacy.
- 7. List the factors influencing the solubility of drugs. Explain any two.
- 8. What is ideal and real solution. What is its importance.
- 9. Define latent heat, vapour pressure, sublimation and critical point.

Answer Briefly (10x2=20)

- 10. Define dipole moment.
- 11. Explain angle of repose.
- 12. Any two advantages and disadvantages of microscopic method of study of powders.
- 13. What is buffer equation and buffer capacity.
- 14. What is optical rotation and its importance in pharmacy.
- 15. List the limitation of distribution law.
- 16. What is refractive index. What is its use in pharmacy.
- 17. What are the applications of Coulter-counter apparatus in pharmacy.
- 18. What is number and weight distribution of particle size.
- 19. List the methods to determine surface area.
