Third Semester B.Pharm Degree Examinations January 2019

Physical Pharmaceutics I

(2017 Scheme)

Time: 3 Hours   **Max. Marks: 75**

- **Answer all questions**
- **Draw diagrams wherever necessary**

Essays   **(2x10=20)**

1. Explain optical rotation and refractive index. Describe their applications and methods of determinations.
2. Describe the factors affecting solubility of drugs on a quantitative approach.

Short Notes   **(7x5=35)**

3. Discuss sublimation with the help of a phase diagram.
4. Particle size determination by Anderson pipette method.
5. Define polymorphism. Write their applications in pharmacy
6. Write a note on porosity. Mention the pharmaceutical applications of porosity
7. Explain with examples, the influence of complexation on drug action.
8. Describe different graphic presentations of size distribution data in a powder.
9. What are the applications of distribution law

Answer Briefly   **(10x2=20)**

10. Describe Angle of Repose.
11. Henry's law of solubility
12. Define dipole moment. What is its application in pharmacy.
13. Positive deviation from Rault's law
14. What is meant by Carr's index
15. The principle involved in the method of pH titration in complexation.
16. Differentiate between Chelate and an inorganic complex. Give example.
17. Eutectic mixtures
18. What is meant by buffer capacity
19. Isotonic solutions

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