

QP Code: 322006

Reg. No.....

**Third Semester B. Pharm Degree Supplementary Examinations
December 2023
Physical Pharmaceutics I**

(2017 Scheme)

Time: 3 Hours

Max. Marks: 75

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers.*
- *Draw diagrams wherever necessary*

Essays

(2x10=20)

1. Discuss any two methods of analysis of complexation.
2. Explain pH determination methods and write the applications of buffers.

Short Notes

(7x5=35)

3. Describe the mechanisms of solute solvent interactions.
4. State distribution law and write its applications.
5. Explain eutectic mixtures.
6. Explain any two methods of determination of particle size.
7. Describe the method of determination of flow properties of powders.
8. Explain Sorenson's pH scale.
9. Explain the significance of densities and bulkiness in pharmaceutical manufacturing.

Answer Briefly

(10x2=20)

10. State Raoult's law.
11. Importance of polymorphism.
12. Refractive index and optical rotation.
13. What are number and weight distribution of powders.
14. What is an isotonic solution.
15. Define buffer capacity.
16. What are the methods used to determine surface area.
17. Mention different solubility expressions.
18. Define real solutions.
19. What are liquid crystals.
