

QP Code: 322006

Reg. No.....

**Third Semester B.Pharm Degree Supplementary Examinations  
December 2020**

**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. Explain the factors influencing the solubility of drugs with a quantitative approach.
2. What is buffer capacity. Explain the various methods for adjusting tonicity and the importance of pharmaceutical buffers

**Short Notes**

**(7x5=35)**

3. Briefly explain the diffusion principles in biological systems.
4. Explain protein binding of drugs.
5. Explain Andreasen's pipette method of determining particle size.
6. Explain the phase diagram of a eutectic system.
7. Applications of dipole moment.
8. Polymer complex.
9. Explain pH titration method

**Answer Briefly**

**(10x2=20)**

10. Optical rotation
11. Raoult's Law.
12. Glassy states
13. Applications of inclusion complexes.
14. Define specific surface. Give its importance
15. Angle of repose
16. Electrometric pH determination
17. Critical point
18. Fick's laws of diffusion
19. Refractive index

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