

QP Code: 322006

Reg. No.....

**Third Semester B. Pharm Degree Regular/Supplementary  
Examinations June 2024**

**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 Distribution law and write its applications and limitations
2. Discuss the methods used for the determination of surface area

**Short Notes**

**(7x5=35)**

3. Explain Raoult's law and its applications
4. Define dissociation constant and write its applications
5. What are different methods for the determination of particle size. Explain any one method.
6. Discuss the method of determination of angle of repose
7. Explain any one method of analysis of complexation
8. Explain the applications of buffers in pharmacy
9. Briefly discuss the importance of bulkiness and density in pharmacy

**Answer Briefly**

**(10x2=20)**

10. Mention the mechanisms of solute solvent interactions
11. What are eutectic mixtures
12. Explain amorphous state
13. Explain the importance of vapour pressure in pharmacy
14. Explain adsorption
15. Define porosity
16. Explain different classes of complexes
17. Sorenson's pH scale
18. Buffer capacity
19. Define isotonic solution

\*\*\*\*\*