

QP Code: 423006

Reg. No.....

**Fourth Semester B.Pharm Degree Supplementary Examinations
March 2026**

Physical Pharmaceutics II

(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 formulation aspects of stable suspension with examples.
2. Classify colloids and discuss their optical and kinetic properties.

Short Notes

(7x5=35)

3. Explain accelerated stability testing for the calculation of shelf life of the drug products.
4. Explain the effect of ionic strength and dielectric constant on stability of pharmaceutical products.
5. How does the thixotropic behaviour affect the stability of the coarse dispersion.
6. Explain the working of falling sphere viscometer.
7. Explain the mechanism of caking of suspension.
8. Explain any Four theories of emulsification.
9. What are the pharmaceutical applications of the colloids. explain.

Answer Briefly

(10x2=20)

10. What are Non-Newtonian systems.
11. Write Heckel equation.
12. What is creaming of emulsion.
13. Explain surface free energy.
14. What is peptization.
15. What is Kraftt point.
16. What is the Faraday -Tyndall effect.
17. Explain Bulges and Spurs in the Rheogram.
18. What is negative thixotropy.
19. Explain micellar solubilization.
