

QP Code: 423006

Reg. No.....

**Fourth Semester B. Pharm Degree Regular/Supplementary
Examinations June 2022
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. Define rheology. Explain Non Newtonian type of flow with rheograms, mechanisms and suitable examples.
2. What is hydrolysis. Explain how hydrolysis causes degradation of a drug and elaborate on method to prevent it.

Short Notes

(7x5=35)

3. Explain stability problems of emulsion.
4. Describe the mechanisms of action of wetting agents.
5. Explain factors influencing settling of particles in suspension.
6. Derive an expression for rate constant of second order reaction.
7. Classify surface active agents with examples and write its applications.
8. Explain the determination of interfacial tension using DuNouy method.
9. Explain electrical properties of colloids.

Answer Briefly

(10x2=20)

10. Define surface tension and mention the unit.
11. Define kinematic and relative viscosity.
12. Gold number.
13. Define adsorption isotherm.
14. Factors to be considered in the preservation of emulsions.
15. Micro emulsions
16. Define shelf life
17. Define breaking of emulsion
18. Sedimentation volume
19. Define pseudo first order reaction.
