## Fourth Semester B.Pharm Degree Regular/Supplementary **Examinations March 2023 Physical Pharmaceutics II**

# (2017 Scheme)

#### Time: 3 Hours

- 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

- 1. Explain the various theories of emulsification
- 2. Discuss the optical and kinetic properties of colloids

## Short Notes

- 3. What is oxidation and explain its method of prevention
- 4. Explain different methods of evaluation of stability of emulsions

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- 5. What are surfactants. Classify them with suitable examples
- 6. Stability problems of emulsion
- 7. Derive an equation for Donnan membrane equilibrium
- 8. Derive an equation for second order reaction kinetics
- Illustrate Ostwald viscometer with its working.

## **Answer Briefly**

- 10 Define stress and strain
- 11. What are non-Newtonian liquids
- 12. Why emulsions are thermodynamically unstable
- 13. What is physical adsorption
- 14. Define Critical Micelle Concentration
- 15.What is rheopexy.
- 16. Define half life
- 17. Define plastic and elastic deformation
- 18. What are deflocculated suspensions
- 19.Define zero order reaction with examples.

(2x10=20)

(7x5=35)

(10x2=20)

Max. Marks: 75