QP Code: 423006 Reg. No......

## Fourth Semester B.Pharm Degree Regular/Supplementary Examinations March 2023 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. Explain the various theories of emulsification
- 2. Discuss the optical and kinetic properties of colloids

Short Notes (7x5=35)

- 3. What is oxidation and explain its method of prevention
- 4. Explain different methods of evaluation of stability of emulsions
- 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
- 9. Illustrate Ostwald's viscometer with its working

Answer Briefly (10x2=20)

- 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 a rheopexy
- 16. Define half life
- 17. Define plastic and elastic deformation
- 18. What are deflocculated suspensions
- 19. Define zero reaction with examples

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## **CORRECTION / NO-CORRECTION FILE**

QPCODE: 423006 Dated: 31-03-2023

**Question No.9** 

Corrected as "Illustrate Ostwald viscometer with its working."

**Question No.15** 

Modified as "What is rheopexy."

**Question No.19** 

Modified as "Define zero order reaction with examples."

Corrections/Modifications/Replacement of Questions if any shall be made available to all students. Take the print out of the Correction File in such cases and distribute to all students.

(Sd/-)

**CONTROLLER OF EXAMINATIONS**