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

Fourth Semester B.Pharm Degree Regular/Supplementary Examinations February 2024 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 various adsorption isotherms with a graphical representation
- 2. Classify colloids and explain its general properties.

Short Notes (7x5=35)

- 3. What is hydrolysis and explain the method of prevention of hydrolysis
- 4. Illustrate falling sphere viscometer with description of its working
- 5. Write a note on HLB number of surfactants. Explain any one method for the determination of the same
- 6. Derive an equation for first order reaction rate constant
- 7. Explain accelerated stability studies
- 8. Enlist advantages and disadvantages of emulsion
- 9. Discuss the concept of controlled flocculation

Answer Briefly (10x2=20)

- 10. Define gold number
- 11. Classify viscometer with examples
- 12. What are surfactants and mention their applications
- 13. Define contact angle
- 14. Classify emulsions
- 15. What is a rheogram
- 16. Define shelf life
- 17. Define first and second order of reaction
- 18. What are Newtonian liquids. Give examples
- 19. What is chemical adsorption
