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

## Fourth Semester B. Pharm Degree Supplementary Examinations December 2019 Physical Pharmaceutics II

## (2017 Scheme)

Time: 3 Hours Max. Marks: 75

- Answer all questions
- Draw diagrams wherever necessary

Essays (2x10=20)

- 1. Define viscosity. Explain thixotropy with rheogram. How will you determine flow properties using Ostwald viscometer.
- 2. Define emulsion. Classify them and explain theories of emulsification with a neat diagram.

Short Notes (7x5=35)

- Accelerated stability testing.
- 4. Explain the methods to determine order of reaction.
- 5. Explain the different methods for purification of colloids.
- 6. HLB scale.
- 7. Explain role of zeta potential in formulation of suspensions.
- 8. Explain the determination of surface tension of liquids by capillary rise method
- 9. Association colloids.

Answer Briefly (10x2=20)

- 10. Brownian movement.
- 11. Define creaming of emulsions.
- 12. Tyndall effect of colloids.
- 13. Define surface free energy.
- 14. What are protective colloids.
- 15. What is dilatant flow. Give example.
- 16. Define half life.
- 17. Define zero order reaction with example.
- 18. Elastic deformation.
- 19. What are structured vehicles.

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