

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Pharm Degree Examination - Mar 2013

Time: Three Hours Max. Marks: 70 Marks

PHYSICAL PHARMACEUTICS (Revised Scheme 3)

Q.P. CODE: 2606

Your answers should be specific to the questions asked Draw neat labeled diagrams wherever necessary

LONG ESSAYS (Answer any Two)

 $2 \times 10 = 20 \text{ Marks}$

- 1. What is an Adsorption Isotherm? Mention its applications. State and explain Langmuir Adsorption Isotherm.
- 2. List out the various methods to determine particle size. Explain in detail Coulter-counter Apparatus.
- 3. Define and Classify Complexes. Define Organic Molecular Complexes with suitable examples.

SHORT ESSAYS (Answer any Six)

 $6 \times 5 = 30 \text{ Marks}$

- 4. What is thixotropy. Describe its measurement and application.
- 5. Explain the methodology of Accelerated Stability Testing with suitable graphs.
- 6. What is Contact Angle? Give its significance in wetting of solids with liquids with examples.
- 7. What are Buffers? Write a note on physiological and pharmaceutical buffers.
- 8. What is Order of Reaction? Describe the various methods used to determine Order of Reaction.
- 9. What are Colloids? Describe different methods of purification of colloids.
- 10. What is Critical Solution Temperature? What is the effect of impurity on it.
- 11. Define and classify Emulsions. Write a note on evaluation of emulsions.

SHORT ANSWERS

 $10 \times 2 = 20 \text{ Marks}$

- 12. Azeotropic Mixtures
- 13. Pseudo Order Reaction
- 14. Structured Vehicles
- 15. Packing Arrangement of Powders
- 16. Coacervation
- 17. Dilatant Materials
- 18. DLVO Theory
- 19. Solubility Curves
- 20. Faraday Tyndall Effect
- 21. BET Equation
