Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Pharm Degree Examination – 03-Jan-2020

Time: Three Hours **Max. Marks: 80 Marks**

Physical Pharmaceutics (Revised Scheme - 2)
Q.P. CODE: 1956

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

LONG ESSAYS (Answer any Two) **2 x 10 = 20 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 Eight) **8 x 5 = 40 Marks**

4. What is Fractional Distillation? Discuss the principle involved in this.
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. Mention the factors effecting flow of powders. Name two agents used to improve flow properties.
8. What are Buffers? Write a note on physiological and pharmaceutical buffers.
9. What is Order of Reaction? Describe the various methods used to determine Order of Reaction.
10. What are Colloids? Describe different methods of purification of colloids.
11. What is Critical Solution Temperature? What is the effect of impurity on it?
12. Define and classify Emulsions. Write a note on evaluation of emulsions.
13. List the various apparatus used to determine Viscosity. Describe in detail Cone and Plate Method.

SHORT ANSWERS **10 x 2 = 20 Marks**

14. Azeotropic Mixtures
15. Pseudo Order Reaction
16. Structured Vehicles
17. Packing Arrangement of Powders
18. Coacervation
19. Dilatant Materials
20. DLVO Theory
21. Solubility Curves
22. Protective Colloids
23. BET Equation

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