tmp.doc

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B.Pharm Degree Examination – Mar 2013

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. List the different methods available for determination of order of a reaction. Explain any one method for the determination of the order of a reaction
2. Discuss the Rheograms for Newtonian and dilatant materials. Give the examples each for the above systems
3. What are colloids? Explain as to how viscosity property can be made use of to establish the Molecular weight of a collidal dispersion

SHORT ESSAYS (Answer any Eight) **8 x 5 = 40 Marks**

4. Discuss the steps involved in the preparation of a pharmaceutical buffer
5. Define dipole moment. How dipole moment can be correlated with biological activity in case of DDT
6. Explain as to how principle of partition Co-efficient are useful in case of multiple extraction in contrast to a single extraction
7. Discuss Harkin's oriented wedge theory to account for the type of emulsion formed
8. Explain as to what do you mean by steady state diffusion
9. What are sedimentation parameters? Explain
10. Discuss the merits and demerits of optical microscopy for particle size determination
11. Deduce freundlich adsorption isotherm and give its graphical representation
12. What is spreading coefficient? Give its significance
13. Write a note on monomolecular inclusion complexes and their applications

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

14. Differentiate between a chelate and an inorganic metal complex with the help of suitable examples
15. Define phase volume ratio and phase inversion in emulsions
16. By what mechanism cholesterol and lecithin act as emulsifuing agents
17. Discuss the concept of any two equivalent spherical diameters
18. Define critical micelle concentration
19. Give two examples for hydrophobic colloids
20. What is a Rheopexy
21. What is critical solution temperature
22. What are microemulsions
23. Define electrophoresis and electro-osmosis

Rajiv Gandhi University of Health Sciences, Karnataka

*****