

# Rajiv Gandhi University of Health Sciences, Karnataka

## II Year B.Pharm Degree Examination – NOVEMBER 2015

**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 x 10 = 20 Marks**

1. Explain the thixotropic properties of the plastic and pseudoplastic materials.
2. What is creaming and cracking of an emulsion? What are the factors affecting creaming and cracking?
3. Classify colloids and discuss optical and kinetic properties of colloids.

**SHORT ESSAYS (Answer any Six)****6 x 5 = 30 Marks**

4. Define & Explain How do you determine dielectric constant?
5. Discuss pharmaceutical buffers system.
6. What are the applications of distribution law?
7. Discuss the phenol water system.
8. Explain channel lattice type of complexes.
9. Explain Fick's first law and second law of diffusion.
10. Explain different methods of determination of order of a reaction.
11. Define and classify adsorption. Explain Freundlich's adsorption isotherm.

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

12. Give examples of natural and synthetic emulgents.
13. Define shelf life.
14. Name two methods used to measure surface area.
15. Define a zwitterion.
16. What is peptization?
17. Define pH and buffers.
18. What do you mean by overages?
19. What is a multipoint viscometer?
20. What is Tyndal effect?
21. Define Spreading coefficient.

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