

Rajiv Gandhi University of Health Sciences, Karnataka

Third Semester B. Pharm Degree Examination – 30-May-2024

Time: Three Hours

Max. Marks: 75 Marks

PHYSICAL PHARMACEUTICS - I

Q.P. CODE: 5010

Your answers should be specific to the questions asked

Draw neat labeled diagrams wherever necessary

All the questions are compulsory

LONG ESSAYS

2 x 10 = 20 Marks

1. Explain in detail different factors affecting the solubility of drugs.

OR

Discuss dielectric constant and dipole moment with their applications in Pharmacy.

2. Define Adsorption isotherms. Explain the behaviour of various types of Adsorption isotherms.

SHORT ESSAYS

7 x 5 = 35 Marks

3. Explain organic molecular complexes with example.

OR

Define contact angle. Write its applications in pharmacy.

4. Explain the process of fractional distillation for the separation of azeotropic mixtures.

OR

Define pH. Deduce buffer equation for weak acid and its salt.

5. Define Critical solution temperature and mention their applications.

6. Write a note on amphiphiles.

7. Write the applications of buffers in pharmaceutical and biological system.

8. Write a note on eutectic mixtures.

9. Explain inclusion complex.

SHORT ANSWERS

10 x 2 = 20 Marks

10. What are Picric acid complex? Give example.

11. Types of pH determination methods

12. Enumerate different methods of analysis of complex.

13. What you mean by polarization?

14. Isotonic and paratonic solutions

15. Define sublimation.

16. Define Zeta-potential.

17. Give Henderson-Hasselbalch equation

18. Define distribution law.

19. Two applications of complexation.
