Rajiv Gandhi University of Health Sciences, Karnataka
Third Semester B. Pharm Degree Examination – 31-May-2023

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.   Discuss in detail about the different factors affecting the solubility of solids in liquid.
                                        OR
     Write a note on optical rotation. Discuss its determination and application.

2.   What are adsorption isotherms? Explain the behavior of various types of adsorption isotherms with examples.

SHORT ESSAYS   **7 x 5 = 35 Marks**

3.   What are Azeotropic Mixtures? How can we separate them?
                        OR
     Write a note on phenol water system and give its applications.

4.   Discuss in detail working of polarimeter.
                        OR
     Give the principle and working of Dunouy's tensiometer.

5.   What are amphiphiles? Give its applications in pharmacy.

6.   Explain inclusion complexes with example.

7.   Discuss the principle involved in continuous variation method of analysis of complexes.

8.   Explain in detail applications of buffers.

9.   Write the electrometric method for determination of pH.

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

10. Define Normality and Molarity of solution.

11. Define refractive index and its application.

12. Define glassy states.

13. Define contact angle.

14. Give any four uses of complexation in pharmacy.

15. What are Quinhydrine complex? Give example.

16. Define protein binding with example.

17. Give any four examples of pharmaceutical buffers.

18. Draw Sorensen's pH scale.

19. What are Isotonic solutions?

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