Sl.No: M2123 **Course Code: BP302T**

VINAYAKA MISSION'S RESEARCH FOUNDATION
(DEEMED TO BE UNIVERSITY), SALEM

B.PHARM. DEGREE EXAMINATION – July 2021
Third Semester

PHYSICAL PHARMACEUTICS I

Time : Three hours Maximum: 75 marks

I. Write essays on any **TWO** questions: **(2 x 10 = 20)**

1. List out the various methods to determine surface tension and explain any two methods of determination of surface tension.
2. Write a note on biological and pharmaceutical buffers.
3. Define complexation. Explain different types of metal ion complexes with examples.

II. Write short answers on any **SEVEN** questions**:** **(7 x 5 = 35)**

4. What is an ideal solution? Give examples.
5. What are the applications of distribution law?
6. Write the principle underlying formation of aerosols.
7. Write a note on liquid crystals and triple point.
8. What is optical activity and write a method to determine optical activity of a substance.
9. State the electrical properties of double layer.
10. Classify surface active agents with examples.
11. Give applications of complexes in pharmacy.
12. What is the principle involved in the solubility method of analysing a complex?

III. Write short notes on : **(10 x 2 = 20)**

13. What are isotonic solutions? Give examples.
14. Give some examples of solution of liquids in liquids.
15. Define pH partition hypothesis.
16. Define Solubility.
17. Define Latent heat of fusion.
18. Define Snell's law.
19. Define spreading coefficient.
20. What are micellus?
21. What are clathrates?
22. Define buffer capacity.

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