

**VINAYAKA MISSION'S RESEARCH FOUNDATION**  
**(Deemed to be University) , SALEM**

**B.PHARM. DEGREE EXAMINATION – October 2021**  
**Fourth Semester**

**PHYSICAL PHARMACEUTICS - II**

Time : Three hours

Maximum: 75 marks

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

1. Define emulsions. Explain in detail Identification tests of emulsion.
2. Define a pharmaceutical suspension. Differentiate between flocculated and deflocculated suspensions.
3. Define colloids. Discuss the electrical properties and kinetic properties of colloids.

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

4. Explain the principle of cup and bob viscometer.
5. Define angle of repose. Explain the method to determine the same.
6. Write the principle and working of coulter counter method to determine particle size with neat diagram.
7. Measurement of Thixotropy. Give its applications in pharmacy.
8. Explain how order of reaction is determined?
9. Describe various derived properties of powders and mention significance of each.
10. Describe any two methods for the purification of Colloids.
11. Draw the flow curves for Newtonian and Non Newtonian types of flow. Give an example for each type of flow.
12. Discuss settling of suspensions.

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

13. What is gold manner?
14. Define Pseudo Zero order reaction with example.
15. Stress and Strain.
16. Relative Viscosity and specific Viscosity.
17. Define phase inversion.
18. Signification of shape factor.
19. What is creaming in emulsions?
20. Electrical double layer.
21. Photolytic degradation.
22. Differentiate between bulk and true density.