Sl.No: M2127 **Course Code: BP403T**

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

B.PHARM. DEGREE EXAMINATION – July 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 and explain in detail non – Newtonian flow of liquids.
2. Write the principle and method involved in the determination of particle size in a powder using Anderson apparatus.
3. Differentiate the different types of colloids. Write briefly on purification of colloids. Add a note on protection of colloids.

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

4. Write a short note on stability of emulsions.
5. Briefly explain the preventive measures for chemical degradation by oxidation.
6. Write in brief on derived propertied of powders.
7. Explain the effect of electrolytes on colloids.
8. Compare the zero, first and second order reactions.
9. Describe Rheology and give its significance in pharmacy.
10. Differentiate flocculated and deflocculated suspensions.
11. Explain HLB formulation of emulsions.
12. Discuss in brief how can the shelf life of a product be determined from accelerated stability testing.

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

13. Angle of repose.
14. Zeta potential.
15. Multiple Emulsion.
16. Associated Colloids.
17. Bulges and Spurs.
18. Dilatent materials.
19. Contact angle.
20. Define Viscosity.
21. Rheogram and rheopexy.
22. Heckel equation.

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