

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

**B.PHARM. DEGREE EXAMINATION – August 2018**  
**Fourth Year**

**FORMULATIVE PHARMACY AND BIOPHARMACEUTICS**

Time : Three hours

Maximum: 90 marks

I. Write essays on any **TWO** questions: **(2 x 15 = 30)**

1. Explain the different types of granulation. Add note on various granulators.
2. Explain the requirements, formulation and evaluation of ophthalmic preparations
3. Explain in detail about the production of hard and soft gelatin capsules. Write about the quality control test or capsules.

II. Write short essays on any **EIGHT** questions: **(8 x 5 = 40)**

4. Write a note on tablet defects.
5. Describe microencapsulation by Air suspension method.
6. Significance of isotonicity and method of adjustment.
7. Write a note on excipients and additive used in parenteral product
8. Write a note on liposome
9. Write about drug distribution.
10. Accelerated stability studies.
11. Valves used in aerosols.
12. Write about various coating process.
13. Aseptic techniques involved in parenteral production.

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

14. Advantages of microencapsulation
15. What is LAL TEST?
16. Importance of photo stability studies.
17. Occusert.
18. Define shelf life
19. Different size of hard gelatin capsule
20. How particle size influence the formulation
21. Name the evaluation test for aerosols.
22. Objective of coating
23. What is grey area?
24. Dissolution