## 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

I. Write essays on any **TWO** questions:

- 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:
  - 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 sued 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

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 $(2 \times 15 = 30)$ 

 $(8 \times 5 = 40)$ 

Maximum: 90 marks