Sl.No: M21600 Course Code: 2910413

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

B.PHARM. DEGREE EXAMINATION – July 2019 Fourth Year

INDUSTRIAL PHARMACY AND BIOPHARMACEUTICS

Time: Three hours Maximum: 70 marks

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

 $(2 \times 15 = 30)$

- 1. Explain in detail about the method of preparation of liposomes and its applications.
- 2. Discuss about the absorption of drugs and factors affecting drug absorption.
- 3. Summarize the types, formulation, defects and manufacturing of tablets in large scale production.

II. Write short essays on any **SIX** questions:

 $(6 \times 5 = 30)$

- 4. Describe the methods used in coating of tablets.
- 5. Summarize the methods to enhance solubility of poorly soluble drugs.
- 6. Stability testing protocol for various pharmaceutical products.
- 7. Describe about evaluation of pharmaceutical packaging materials.
- 8. Discuss about aseptic techniques for parenteral products.
- 9. Enumerate about evaluation of transdermal drug delivery system.
- 10. Explain the preparation of microcapsules by co-acervation phase separation technique.
- 11. Describe about benefits and limitations of prolonged action pharmaceuticals.

III. Write short notes on any **FIVE** questions:

 $(5 \times 2 = 10)$

- 12. What are the steps involved in sugar coating?
- 13. Define pharmacokinetics.
- 14. State about pyrogenicity.
- 15. Define apparent volume of distribution.
- 16. Chipping and lamination.
- 17. Write about storage of capsule dosage forms.