Sl.No: M21132 Course Code: MPH103T

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

M.PHARM. DEGREE EXAMINATION – September 2021 First Semester

BRANCH: PHARMACEUTICS MODERN PHARMACEUTICS

Time: Three hours Maximum: 75 marks

(Draw neat labeled diagrams wherever necessary your answer should be specific to the questions asked)

SECTION -A

I. Answer any **THREE** questions:

 $(3 \times 15 = 45)$

- 1. Write the detail physics of tablet compression and compaction profiles.
- 2. Discuss the design of experiments factorial design for product and process development.
- 3. Define pharmaceutical validation and write its scope and merits. Discuss the general guidelines for the validation and calibration of pharma equipment.
- 4. Define dissolution and discuss the diffusion layer theory that influence drug dissolution using Noyes Whitney's equation.

SECTION -B

II. Answer any **THREE** questions:

 $(3 \times 10 = 30)$

- 5. Explain the kinetic of stability and stability testing.
- 6. Write in detail inventory management and control sales of forecasting and cost control.
- 7. What is ANOVA? If there is a significant difference, where? Specifically mention any two differences.
- 8. Concept and objective of dissolution testing. Explain in detail similarity factors $F_1 \& F_2$ in dissolution.