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

B.PHARM. DEGREE EXAMINATION – August 2018 Third Year

PHARMACEUTICAL QUALITY ASSURANCE

Time : Three hours

Maximum: 70 marks

 $(2 \times 15 = 30)$

 $(6 \times 5 = 30)$

 $(5 \ge 2 = 10)$

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

- 1. How is the philosophy of TQM applicable to pharmaceutical industry in achieving "Zero defect concept" through TQM?
- 2. Write in detail about location design, plant loyal and construction of a pharmaceutical manufacturing facility?
- 3. What is ICH? Explain on the functioning and methodology of drafting a guideline in ICH?

II. Write short essays on any SIX questions:

- 4. What are the different types of waste? Explain the method adopted for waste disposal of pharmaceutical.
- 5. What is MFR? Brief on the content of master formula record.
- 6. Explain on the good laboratory practice procedure adopted in pharmaceutical industry
- 7. Name and describe on the various parameters performed in analytical method validation?
- 8. Explain the method adopted in selection, purchase and maintenance of equipment.
- 9. Define audit. Explain the audit process performed in pharmaceutical laboratories?
- 10. Describe on the "six sigma concept".
- 11. Write on the specimen protocols maintained for clinical ad non clinical testing
- III. Write short notes on any **FIVE** questions:
 - 12. Define calibration and validation
 - 13. What does CFR part 211 represent.
 - 14. Which is the regulatory body of India for pharmaceutical?
 - 15. Brief on distribution record.
 - 16. Expand US FDA
 - 17. Distinguish b/w Qc and QA