Sl.No: M19407 **Course Code : 2910414**

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

B.PHARM. DEGREE EXAMINATION – August 2018
Fourth Year

MODERN METHODS OF PHARMACEUTICAL ANALYSIS

Time : Three hours Maximum: 70 marks

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

1. With a neat labeled diagram, explain the working of UV-visible spectrophotometer.
2. With a neat diagram explain the principle and instrumentation of HPLC.
3. Discuss about various types of potentiometric titrations. Explain the method for determining end point in potentiometric titration.

II. Write short essays on any **SIX** questions**:** **(6 x 5 = 30)**

4. What are different regions of the IR spectrum? Explain various types of stretching and bending vibrations.
5. Describe the principle of separation of Electrophoresis.
6. Write the method of Calibration and validation of Fluorimeter.
7. What is the principle involved in flame emission spectroscopy?
8. Explain the theory 'atomic adsorption spectroscopy'.
9. Write a note on reference electrodes.
10. Give the principle and application of DSC.

III. Write short notes on any **FIVE** questions: **(5 x 2 = 10)**

11. Wood – ward's rules in UV-spectroscopy.
12. Explain the terms chemical shift and shielding.
13. Two – dimensional chromatography.
14. What is Ilvokic equation?
15. Define the term quenching.
16. Draw the conductometric titration curve for a strong base Vs a mixture of strong and weak acid.
17. What is reverse phase chromatography?

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