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

M.PHARM. DEGREE EXAMINATION – September 2021
First Semester

BRANCH: PHARMACEUTICAL ANALYSIS

MODERN PHARMACEUTICAL ANALYTICAL TECHNIQUES

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 x 15 = 45)**

1. Define Beer- Lambert's law. Write in detail about working principle, design and applications of UV- visible spectro photometer.

2. Explain about the principle, instrumentation and pharmaceutical applications of derivative differential thermal analysis (DDTA)

3. Define fluorescence. Describe about the factors affecting it. Write in detail about the instrumentation and applications of fluorescence spectrophotometer.

4. Write in detail about the principle, instrumentation and applications of potentiometer.

SECTION –B

II. Answer any **THREE** questions**:**   **(3 x 10 = 30)**

5. Define Bragg's law. Write down the applications of X- ray diffraction.

6. Define chemical shift. Describe about the factors influencing IT.

7. Write in detail about various interferences in flame emission spectroscopy.

8. Describe about the principle, instrumentation and applications of HPLC.

*****