

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[LQ 0121]

JANUARY 2021

Sub. Code: 2951

(APRIL 2020 EXAM SESSION)

M.PHARMACY DEGREE EXAMINATION

SEMESTER-I (PCI New regulations 2016)

PHARMACEUTICAL ANALYSIS – MPA

PAPER I – MODERN PHARMACEUTICAL ANALYSIS

*Q.P. Code : 262951*

Time : Three hours

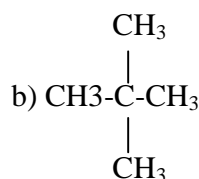
Answer ALL Questions

Maximum : 75 Marks

**I. Elaborate on:**

(2 x 20 = 40)

1. a) Write the principle, diffraction methods and applications of X-ray diffraction analysis.  
b) Write a note on moving boundary electrophoresis.
2. a) Explain the principle and instrumentation of AAS.  
b) Indicate what NMR spectra you expect from the following compounds.



- c) Write the principle and instrumentation on Flame photometry.

**II. Write notes on:**

(7 x 5 = 35)

1. Explain about the relaxation process in NMR spectroscopy.
2. Write about the columns used in HPLC.
3. Write about the ions produced in Mass Spectroscopy.
4. Write a note on NMDR.
5. Write the ion collectors used in Mass Spectroscopy. Explain with a neat labeled diagram.
6. Isotopic peaks in Mass Spectroscopy.
7. Write the detectors used in HPLC. Explain about UV-Visible detector.

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