

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

[MPHARM 0921]

SEPTEMBER 2021
(OCTOBER 2020 EXAM SESSION)

Sub. Code: 2945

M.PHARMACY DEGREE EXAMINATION
SEMESTER-II (PCI New regulations 2016)
PHARMACEUTICAL CHEMISTRY - MPC
PAPER I – ADVANCED SPECTRAL ANALYSIS
Q.P. Code : 262945

Time : Three hours

Answer ALL Questions

Maximum : 75 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Explain ATR-IR. Discuss Woodward Fieser rule for α - β unsaturated carbonyl compounds.
2. a) Explain the principle, instrumentation and applications of CE-MS.
b) Explain the principle with neat diagram and applications of TGA.

II. Write notes on:

(7 x 5 = 35)

1. IR Interpretation of Amines.
2. Predict and explain the signal positions (δ value) and spin – spin splitting in the ^1H NMR spectra of
a) Ethyl benzene b) Benzyl alcohol.
3. Mc Lafferty rearrangement of fragmented ions in Mass Spectrometry.
4. Bio Assay.
5. Meta stable ions.
6. HPTLC.
7. Radioimmuno assay of digitalis.
