

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

[LP 955]

NOVEMBER 2019

Sub. Code: 2955

M.PHARM. DEGREE EXAMINATION
(PCI New regulations 2016)
SEMESTER-II
BRANCH-III – PHARMACEUTICAL ANALYSIS – MPA
PAPER I – ADVANCED INSTRUMENTAL ANALYSIS

Q.P. Code : 262955

Time : Three hours

Maximum : 75 Marks

I. Elaborate on:

(2 x 20 = 40)

1. a) Describe the principle, instrumentation and applications of High Performance Thin Layer Chromatography (HPTLC).
b) Explain briefly about MALDI and FT-ICR.
c) Write a detailed note on LC-NMR.
2. a) Discuss the principle and instrumentation of Mass spectrometry.
b) Explain in detail about Ion exchange chromatography.
c) Enumerate the various applications of HPLC.

II. Write notes on:

(7 x 5 = 35)

1. Write short notes on Ion pair chromatography.
2. Give the construction and working of Quadrupole mass analyser.
3. Discuss the applications of NMR spectroscopy.
4. What are the different detectors used in HPLC?
5. Explain about HETP.
6. Give a detailed account on CE-MS.
7. Describe in detail about derivatization techniques in Gas chromatography.
