

M.PHARM. DEGREE EXAMINATION
(PCI New regulations 2016)
SEMESTER-I
BRANCH VI – PHARMACOLOGY – MPL
PAPER I – MODERN PHARMACEUTICAL ANALYTICAL
TECHNIQUES

Q.P. Code : 262981

Time : Three hours

Maximum : 75 Marks

I. Elaborate on:

(2 x 20 = 40)

1. a) Discuss the theory and applications of UV-Visible Spectroscopy.
b) What are the different factors affecting Fluorescence?
c) Explain the principle and instrument of an IR Spectrometer with a neat diagram.
2. a) Elaborate about High Performance Thin Layer Chromatography (HPTLC).
b) Describe the working principle, instrumentation and applications of NMR Spectroscopy.

II. Write notes on:

(7 x 5 = 35)

1. Discuss the principle and instrumentation of Capillary Electrophoresis.
2. Write a brief note on Thermogravimetric Analysis (TGA).
3. With neat labeled diagram, explain the instrumentation of Flame Emission Spectroscopy.
4. Discuss in detail about Column Chromatography.
5. Write short notes on Coupling Constant.
6. What are the various detectors used in Gas Chromatography?
7. Describe the working principle of Quadrupole and Time of Flight Mass Analysers.
