

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

[LQ 0121]

JANUARY 2021

Sub. Code: 2931

(APRIL 2020 EXAM SESSION)

M.PHARMACY DEGREE EXAMINATION

SEMESTER-I (PCI New regulations 2016)

PHARMACEUTICS – MPH

PAPER I – MODERN PHARMACEUTICAL ANALYTICAL TECHNIQUES

Q.P. Code : 262931

Time : Three hours

Answer ALL Questions

Maximum : 75 Marks

I. Elaborate on:

(2 x 20 = 40)

1. a) Explain the theory of U.V absorption and add a note on effect of Auxochromes on Chromophores.
b) With a neat diagram, explain the construction and working of double beam UV-Visible Spectrophotometer.
2. a) Describe the principle and working of HPLC with a neat labeled diagram.
b) With neat labeled diagram, explain the principle and instrumentation of Gas liquid Chromatography.

II. Write notes on:

(7 x 5 = 35)

1. Explain the sampling techniques used in infrared spectroscopy.
2. Write the principle involved in Flame emission spectroscopy.
3. Discuss the principle of nuclear magnetic spectroscopy.
4. Write the theory and various types of ions produced in mass spectroscopy.
5. Write a note on the principle of Radio Immuno Assay.
6. How X-rays are generated? Briefly explain X-ray powder diffraction method.
7. Explain briefly about Gel Electrophoresis.
