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

Sub. Code: 2944

[M.PHARM 0823] AUGUST 2023 (APRIL 2023 EXAM SESSION)

M.PHARMACY DEGREE EXAMINATION SEMESTER - I (PCI New Regulations 2016) PHARMACEUTICAL CHEMISTRY - MPC PAPER IV - CHEMISTRY OF NATURAL PRODUCTS

Q.P. Code: 262944

Time: Three hours Answer ALL Questions Maximum: 75 Marks

I. Elaborate on: $(2 \times 20 = 40)$

1. a) Enumerate briefly the chemistry and structure elucidation of cholesterol.

- b) Describe the clinical applications and advances in gene therapy.
- 2. a) Brief the general methods of structural elucidation of terpenoids.
 - b) Systematically elucidate the structure of quercetin.

II. Write notes on: $(7 \times 5 = 35)$

- 1. Write a note on Kuhn Roth method & Herzig Meyer method in structure determination in alkaloids.
- 2. Explain various mass spectral methods of elucidating the structure of penicillin.
- 3. Explain the active constituents with structure present in Curcuma longa Linn.
- 4. Write a note on the chemistry of sterols.
- 5. Write briefly on the history and chemical aspects of antimalarial drugs and its analogues.
- 6. Explain the physiological significance of vitamin B series.
- 7. Brief out the application of IR spectroscopy in structure determination of natural compounds.
