

PARUL UNIVERSITY
FACULTY OF PHARMACY
M.Pharm. Winter 2022 - 23 Examination

Semester: 1
Subject Code: MPC 104T
Subject Name: Chemistry of Natural Products

Date: 20/03/2023
Time: 10:00am to 10:00pm
Total Marks: 75

Instructions:

1. Figures to the right indicate maximum marks.
2. Make suitable assumptions wherever necessary.

Q.1 Essay Type Questions. (any 2 out of 3) (15 Marks Each) (30)

1. Elucidate the structure of Reserpine
2. A) Describe Erythromycin as lead for generation of new macrolide antibiotics.
B) Add a note on structural elucidation of Menthol along with its synthesis
3. A) Discuss in detail oligonucleotide therapy.
B) Give the structural characterization of Morphine using IR, ¹HNMR and MS.

Q.2 Short Essay Type Questions. (any 5 out of 6) (5 Marks Each) (25)

1. Discuss anticancer drugs as lead for development of new pharmaceutical.
2. Write short note on nomenclature of steroids
3. Write short note on chemistry and physiological significance of Vitamin B2
4. Explain the active constituents of Pterocarpus marsupium used in diabetic therapy
5. Explain structural characterization of Quercetin using IR and ¹HNMR
6. Discuss the structure elucidation of Ephedrine.

Q.3 Short Answers. (2 Marks Each) (20)

1. Discuss the SAR of Lovastatin
2. Add a note on morphine antagonist
3. Write any one method used for degradation of alkaloid with example
4. Explain the SAR of estrogen
5. Discuss isolation of flavonoids
6. Give the physiological significance of Vitamin A
7. Write the reaction upon oxidation of Citral
8. Write short note on hybridoma technology
9. Explain the SAR of Curcumin
10. Explain the functional group of Camphor using IR