

GUJARAT TECHNOLOGICAL UNIVERSITY
M.PHARM - SEMESTER-1 EXAMINATION – SUMMER-2019

Subject Code: MPC104T**Date: 04/06/2019****Subject Name: Chemistry of Natural Products****Time: 02:30 PM TO 05:30 PM****Total Marks: 80****Instructions:**

1. Attempt any five questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- | | | | |
|-------------|-----|--|-----------|
| Q.1 | (a) | What is Natural products as lead and write the methods for the selection of lead ?. | 06 |
| | (b) | Write a note about Lovastatin | 05 |
| | (c) | Write brief note on Teniposide –as an anticancer drug. | 05 |
| Q.2 | (a) | Describe the stereochemistry of steroids. | 06 |
| | (b) | Write chemistry of male contraceptive agents. | 05 |
| | (c) | Write structure elucidation of ephedrine. | 05 |
| Q.3 | (a) | Write briefly the classification and isoprene rule of terpenoids. | 06 |
| | (b) | Give structure elucidation of squalene | 05 |
| | (c) | Write brief note on Taxol | 05 |
| Q.4 | (a) | Give general methods for determining Hydroxyl group | 06 |
| | (b) | Give general methods for determining nature of Nitrogen in alkaloids | 05 |
| | (c) | Discuss chemistry of any one of macrolid antibiotics. | 05 |
| Q.5 | (a) | Write note on application of ^1H NMR and ^{13}C NMR in structural characterization | 06 |
| | (b) | Write structure elucidation of Quercetin. | 05 |
| | (c) | Discuss active constituents of <i>Gymnema sylvestres</i> -as an antidiabetic agent. | 05 |
| Q. 6 | (a) | Write informative notes on Morphine and its analogues | 06 |
| | (b) | Write chemistry and physiological significance of folic acid | 05 |
| | (c) | Discuss active constituents of <i>Curcuma longa</i> -as an antitumor | 05 |
| Q.7 | (a) | | 06 |
| | | Describe Oligonucleotide therapy. | |
| | (b) | Write in brief recent advances in Gene therapy | 05 |
| | (c) | | 05 |
| | | Write note on rDNA technology | |
