First Semester M.Pharm Degree Regular/Supplementary Examinations **March 2020** 

## M.Pharm (Pharmaceutical Chemistry)

Paper IV - Chemistry of Natural Products (MPC 104T)

(Common for 2017 and 2019 Scheme)

### Time: 3 Hours

- Answer all questions to the point neatly and legibly
  Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space
- Answer all parts of a single question together 
  Leave sufficient space between answers
- Draw table/diagrams/flow charts wherever necessary

#### Essays

- 1. Explain the concept of natural products as leads in the case of cardiovascular and anticancer drugs.
- 2. Discuss the general methods of structural elucidation of alkaloids.
- 3. Describe the chemistry of vitamin  $B_1$ ,  $B_2$  and  $B_{12}$

#### Short Notes

- 4. Oligonucleotide therapy.
- Structural characterization of vitamin D using NMR and MASS spectrometry.
- 6. Active constituents of Swertia chirata and Trigonella foenum Graccum in indigenous diabetic therapy.
- 7. Quinine and its analogs in anti-malarial agents.
- 8. Sterols.
- 9. Chemistry of female contraceptive agents.
- 10. Chemistry of retinol and phytol.
- 11.A note on isoprene rule.
- 12. Beta lactam antibiotics.

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QP CODE: 114331

(3x10=30)

(9x5=45)

Reg. No:.....

# Total Marks: 75