QP CODE: 114331 Reg. No:......

First Semester M.pharm Degree Examinations April 2018 M.Pharm (Pharmaceutical Chemistry)

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

Time: 3 Hours Total Marks: 75

- Answer all Questions.
- Draw Diagrams wherever necessary.

Essays (3x10=30)

- 1. Describe briefly the classification, isolation, purification of alkaloids.
- 2. Explain the chemistry and physiological significance of vitamin B₁₂
- 3. What are the different methods used for structural characterizations of natural products. Explain briefly.

Short Notes (9x5=45)

- 4. Structural elucidation of quercetin
- 5. Stereochemistry and nomenclature of steroids
- 6. Hybridoma technology.
- 7. Phyllanthus niruri
- 8. Explain How the Structure of Morphine Can be characterized using various Spectroscopic Methods.
- 9. Explain the chemistry of sterols.
- 10. Clinical application and recent advances in gene therapy.
- 11. The structure and uses of emetine, menthol, vitamin B₁ and folic acid.
- 12. The principle of DNA estimation.
