QP CODE: 312006 (new scheme) Reg.No:

Third Year B.Pharm Degree Supplementary Examinations January 2018 PHARMACEUTICAL CHEMISTRY IV

(Chemistry of Natural Products)

Chemistry of Natural Froduct

(2012 Scheme)

Time: 3 Hours Total Marks: 100

- Answer all Questions.
- Write chemical structures/equations wherever necessary.

Essay (3x10=30)

- 1. Discuss the chemistry and uses of camphor.
- 2. Classify alkaloids with examples. Outline the general methods for the structural elucidation of Alkaloids
- 3. What are cardiac glycosides. Discuss the chemistry including their chemical structures of cardiac glycosides.

Short notes (14x5=70)

- 4. Structural determination of glucose and fructose
- 5. Zwitter ions and isoelectric point
- 6. Chemistry of vitamin C
- 7. Interrelationship of caffeine, theobromine and theophylline
- 8. Analytical constant of fats & oils and their significance
- 9. Nomenclature of steroids
- 10. Synthesis of progesterone from cholesterol
- 11. Structures of prostaglandins
- 12. Structure and physiological role of glucagon
- 13. Structure and biological activities of thyroxin
- 14. Classification of proteins
- 15. Properties of reducing sugars
- 16. Pharmaceutical importance of amino acids
- 17. Steroidal oral contraceptive agents
