

QP CODE: 312006 (new scheme)

Reg.No:

**Third Year B.Pharm Degree Supplementary Examinations
January 2018**

**PHARMACEUTICAL CHEMISTRY IV
(Chemistry of Natural Products)**

(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 thyroxine
14. Classification of proteins
15. Properties of reducing sugars
16. Pharmaceutical importance of amino acids
17. Steroidal oral contraceptive agents
