

Third Year B. Pharm Degree Supplementary Examinations - July 2016

**PHARMACEUTICAL CHEMISTRY IV**  
**(Chemistry of Natural Products)**  
**(2010 Scheme)**

**Time: 3 Hours**

**Total Marks: 100**

- Answer all Questions.
- Write equations wherever necessary.

**Essay**

**(3x10=30)**

1. Explain the structural elucidation of ephedrine
2. Explain the chemistry and uses of camphor.
3. Discuss in detail about the structural elucidation of vitamin B<sub>2</sub>

**Short notes**

**(14x5=70)**

4. Structural elucidation of uric acid.
5. What are polypeptides and mention the structural features of insulin.
6. Determination of structure of N-terminal amino acids of peptides (end group analysis).
7. Cellulose and cellulose derivatives.
8. Explain the method to determine the saponification value of oils and fat.
9. Structure and uses of cortisone, hydrocortisone and important synthetic corticosteroids
10. How do you determine the alcoholic-OH group and carbonyl group in alkaloids
11. Determination of ring size of monosaccharides.
12. Structure and biological importance of prostaglandins.
13. Stereochemistry and numbering the ring system of steroids.
14. Structure and uses of maltose and vitamin B<sub>6</sub>.
15. Chemistry of cardiac glycosides
16. Classify terpenoids and mention isoprene rules.
17. Epimerization and osazone formation

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