

Third Year B.Pharm Degree Supplementary Examinations - August 2014

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

**Time: 3 Hours**

**Total Marks: 100**

- Answer all Questions.
- Write chemical structures wherever necessary"

**Essay**

**(3x10=30)**

1. Discuss in detail the structural elucidation of uric acid.
2. How will you determine the ring size of glucose. List out the characteristic differences between glucose and fructose.
3. Elucidate the structure of atropine in detail.

**Short notes**

**(14x5=70)**

4. Structure, biological activities and uses of aldosterone.
5. What are prostaglandins. Mention the structure and uses of important prostaglandins.
6. Steroidal oral contraceptive agents.
7. Show the inter relationship of oestrone, oestradiol and oestriol.
8. Explain the chemistry of sapogenins
9. Hofmann's exhaustive methylation method using pyridine as example.
10. Chemistry and uses of camphor.
11. Deoxy sugars and denaturation of proteins.
12. Explain N-terminal residue analysis.
13. Explain the primary structure of proteins.
14. Elucidate the structure of pyridoxine.
15. Define the term steroids and explain the chemistry of cholesterol.
16. Discuss the chemistry of cardiac glycosides.
17. Define 'Iodine value'. Explain any one method of its determination in detail. Add a note on its significance.

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