

Third Year B.Pharm Degree Examinations - September 2014

PHARMACEUTICAL CHEMISTRY IV
(Chemistry of Natural Products)**Time: 3 Hours****Total Marks: 100**

- Answer all Questions.
- Write equations wherever necessary.

Essay**(3x10=30)**

1. Discuss in detail the structural elucidation of vitamin A.
2. Explain in detail the chemistry of cardiac glycosides.
3. Explain the structural elucidation of morphine in detail.

Short notes**(14x5=70)**

4. Skeletal structure & uses of lactose and vitamin B₁.
5. Outline the synthesis of progesterone from cholesterol.
6. What are steroids and explain the chemistry of ergo sterol.
7. Structural elucidation of caffeine.
8. Outline the various analytical standards to assess purity of fixed oils.
9. Discuss the chemistry of alpha-terpineol.
10. Briefly explain on synthetic anabolic steroids.
11. Classify terpenoids and mention isoprene rules.
12. Two important general methods for synthesis of amino acids.
13. Ring structure of glucose.
14. Isoelectric point and epimerization.
15. What are polypeptides and mention the structural features of insulin.
16. Structure and biological importance of therapeutically useful prostaglandins.
17. How do you ascertain the presence and number of N-methyl group and phenolic hydroxyl group in alkaloids
