

Third Year B.Pharm Degree Supplementary Examinations - August 2015

**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. Discuss the structure elucidation and pharmacological activity of ephedrine.
2. Explain the chemistry of cholesterol in detail.
3. Discuss the structure elucidation, chemistry and pharmacological uses of vitamin B<sub>1</sub>.

**Short notes**

**(14x5=70)**

4. Define saponification value. Explain the method to determine it.
5. Show the inter relationship between oestrone, oestradiol, and oestriol structures.
6. Chemistry of sapogenins.
7. Chemistry and uses of camphor.
8. Secondary structure of proteins.
9. Epimerization of D glucose.
10. Denaturation of proteins.
11. Define and classify amino acids with structures.
12. Chemical structure and biological importance of vitamin A and vitamin B<sub>2</sub>.
13. Chemical structures and biological importance of therapeutically useful prostaglandins.
14. Discuss the structural features and uses of insulin.
15. What are glucocorticoids. Mention the structure and uses of important synthetic corticosteroids.
16. Chemistry and structural elucidation of caffeine.
17. Synthesis and uses of non-steroidal estrogenic compounds.

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