

# **2010 Scheme**

**QP CODE: 302006**

**Reg. No: .....**

## **Third Year B.Pharm Degree Supplementary Examinations January 2022**

### **Pharmaceutical Chemistry IV (Chemistry of Natural Products)**

**Time: 3 Hours**

**Total Marks: 100**

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Write chemical structures/equations wherever necessary.*

**Essay**

**(3x10=30)**

1. Discuss the chemical properties and any two methods of synthesis of Amino acids
2. Explain the important reactions in the structural elucidation of vitamin C
3. Discuss the nomenclature and stereochemistry of steroids.

**Short notes**

**(14x5=70)**

4. Write the structure, biological activity and uses of mineralocorticoids
5. Given an account on structures and biological importance of prostaglandins
6. Define saponification value. Explain the method of determination of saponification value for the given fat/oil
7. Give an account on terminal group analysis for the structural determination of peptides
8. What are terpenoids. Write the classification of terpenoids based on isoprene unit with examples
9. Explain mutarotation with examples
10. Write note on essential amino acids with examples
11. Add an account on interrelationship of xanthene bases
12. Explain the SAR of cardiac glycosides
13. Give the structure, biological activity and uses of hydrocortisone
14. Write the chemistry and pharmacological activity of ephedrine
15. Write the chemistry and uses of sapogenins
16. Give chemical structure and physiological roles of cholesterol and bile acids
17. Discuss the structural features of cellulose and its derivatives

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