

# **2010 Scheme**

**QP CODE: 302006**

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

## **Third Year B.Pharm Degree Supplementary Examinations January 2021**

### **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 nomenclature and stereochemistry of steroids.
2. Explain the structural elucidation of caffeine
3. Give an account on terminal group analysis for the structural determination of peptides.

**Short notes**

**(14x5=70)**

4. Discuss the pharmaceutical importance of carbohydrates
5. Explain mutarotation with examples
6. Discuss the osazone formation and Lobry de Bruyn–van Ekenstein reactions
7. Enumerate the pharmaceutical importance of polypeptides and proteins
8. Explain the Hofmann exhaustive methylation method
9. Explain the chemistry and pharmaceutical uses of vitamin C
10. Discuss the chemistry of cardenolides and bufadienolides
11. Define saponification value. Explain the method in the determination saponification value for the given fat/oil
12. Discuss the chemistry and pharmacological activity morphine
13. Discuss the interrelationship of estrone, estradiol and oestriol
14. Explain the structure, biological activity and uses of testosterone
15. Explain the synthetic anabolic steroids
16. Explain the structure, biological activity and uses of thyroxin
17. Explain the structure, biological activity and uses of synthetic corticosteroids

\*\*\*\*\*