

# 2012 Scheme

QP CODE: 312006

Reg. No: .....

## **Third Year B.Pharm Degree Supplementary Examinations March 2025 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. Classify proteins with suitable examples. Discuss the pharmaceutical importance of amino acids.
2. Explain mutarotation and discuss the ring structure of glucose.
3. Enlist the analytical constants of fats and oils. Explain the method of determination and significance of any two.

**Short notes**

**(14x5=70)**

4. Discuss the chemistry of cholesterol.
5. Discuss the biological activities of thyroxin.
6. Structure and uses of any two synthetic corticosteroids.
7. Structure and physiological role of glucagon.
8. Write any two structures of prostaglandins with their uses.
9. Discuss the structural elucidation of uric acid.
10. Explain the chemistry of sapogenins.
11. Chemistry and uses of camphor.
12. Discuss the various physical properties of proteins.
13. Structure and importance of cellulose derivatives.
14. Differentiate between reducing and non-reducing sugars.
15. Discuss the chemistry of bile acids.
16. Write a note on anabolic steroids with examples.
17. Explain Hoffmann exhaustive methylation method in the structure elucidation of alkaloids.

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