

2010 Scheme

QP CODE: 302006

Reg. No:

Third Year B.Pharm Degree Supplementary Examinations

September 2024

**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. Describe the general methods employed for the structural elucidation of alkaloids.
2. Classify Vitamins and explain the structural elucidation and pharmaceutical uses of Vitamin D.
3. Explain in detail about the structure and physiological roles of Glucagon.

Short notes

(14x5=70)

4. Chemistry and pharmaceutical uses of vitamin B₁.
5. Mutarotation and its significance.
6. Elucidate the structure of uric acid.
7. Define isoprene rule with examples.
8. Write the SAR of cardiac glycosides.
9. Explain the ring structure of Glucose.
10. Write any three methods of preparation of amino acids.
11. Enumerate the interrelationship of caffeine, theophylline and theobromine.
12. Define saponification value and give its significance.
13. Explain the Chemistry of Cholesterol.
14. Write short notes on steroidal oral contraceptive agents.
15. Write the structure and uses of cortisone and hydrocortisone.
16. Give the Biological importance of prostaglandins.
17. Define Zwitter ion and isoelectric point of amino acids with suitable examples.
