

2010 Scheme

QP CODE: 302006

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. Describe in detail about the primary, secondary and tertiary structures of proteins.
2. Classify carbohydrates with examples and explain the chemical reactions including osazone formation and epimerization.
3. Explain in detail about the structural features and sequence differences in human and beef insulin.

Short notes

(14x5=70)

4. Outline the chemistry and physiological importance of vitamin A.
5. Chemistry of Morphine
6. Elucidate the structure of caffeine.
7. Outline the chemistry of geraniol.
8. Chemistry of sapogenins.
9. Ring structure of glucose.
10. Write the chemical reactions of amino acids
11. Enumerate the interrelationship of oestrone, oestradiol and oestriol.
12. Define iodine value and give its significance.
13. Explain the chemistry of ergosterol.
14. Write short notes on thyroid hormones.
15. Write the structure and uses of aldosterone.
16. Give the biological importance of synthetic corticosteroids.
17. Define peptide bond and the determination of end group analysis.
