

2012 Scheme

QP CODE: 312006

Reg. No:

Third Year B.Pharm Degree Supplementary Examinations August 2023 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. Write the structures of sucrose, maltose and lactose. Discuss the properties of Sucrose.
2. Classify amino acids. Write a note on peptide synthesis. Explain any one chemical method for end group analysis.
3. Discuss the chemistry and structural elucidation of caffeine.

Short notes

(14x5=70)

4. Explain on osazone formation and oxidation reduction reactions of carbohydrates.
5. Write the pharmaceutical importance of amino acids and proteins.
6. Write the structural features and uses of geraniol, camphor and alpha terpeniol.
7. Define alkaloids and give their chemical classification with examples and structures.
8. Outline the structural elucidation of Vitamin C.
9. Briefly explain the principle involved in determination of Saponification value and iodine value of fats and oils.
10. Discuss the chemistry of bile acids.
11. Give an account on steroidal oral contraceptive agents.
12. Write the chemical structures of • Oestriol • Thyroxin • Hydrocortisone
• Any one synthetic glucocorticoid • Aldosterone.
13. Discuss the biological importance of Prostaglandins and outline their structural features.
14. Define glycosides and write the structures of cardiac glycosides with uses.
15. Explain Hoffman exhaustive methylation method and give its significance in structural determination of alkaloids.
16. Write the structure and pharmaceutical uses of Vitamin A, B₂ and B₆.
17. Write the structure and biological activities of testosterone and add a note on synthetic anabolic steroids.
