

2010 Scheme

QP CODE: 302006

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. Define and classify carbohydrates with structural examples. Discuss about the structure determination of glucose.
2. Describe about structural elucidation of thiamine and Vitamin C.
3. What are glycosides. Discuss about the structural-activity relationship of cardiac glycosides.

Short notes

(14x5=70)

4. Give a note on Lobry De Bruyn - Van Ekenstein reaction.
5. Define, classify and describe pharmaceutical uses of proteins.
6. What are terpenoids. Give a note on isoprene rule.
7. Discuss about the chemistry and uses of geraniol.
8. Define and classify alkaloids with examples.
9. What are essential amino acids. Outline the general preparation method of amino acid.
10. Give important structural elucidation reactions of ephedrine.
11. Explain the chemistry of saponins.
12. Explain about isoelectric point and peptide synthesis.
13. Give the structures and functions of vitamin A and Vitamin B₆.
14. Give important structural elucidation reactions of uric acid.
15. List the analytical constants of fats and oils. Explain about any one constant.
16. Explain the chemistry of bile acids.
17. Structure and biological activities of androgens.
