

2010 Scheme

QP CODE: 302006

Reg. No:

**Third Year B.Pharm Degree Supplementary Examinations June 2022
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. Discuss the important reactions in the structural determination of Glucose
2. Explain the general methods used in the structural elucidation of alkaloids
3. Explain the structural elucidation of uric acid

Short notes

(14x5=70)

4. Write the synthesis and uses of nonsteroidal estrogenic compounds
5. Write the structural features and physiological role of insulin.
6. Define acid value. Explain the method in the determination of acid value for the given fat/oil
7. Give an account on pharmaceutical importance of polypeptides and proteins
8. What are terpenoids. Explain the isoprene and special isoprene rule
9. Write the structure of disaccharides and explain the non-reducing nature of sucrose
10. Define amino acids and classify amino acids based on chemical nature with example for each class
11. Explain the chemistry and pharmaceutical uses of vitamin A and D
12. Chemistry and uses of anabolic steroids
13. Explain the important reactions in the structural elucidation of ephedrine
14. Chemistry of sapogenins
15. Discuss the structures and interrelationship of estrone, estradiol and oestriol
16. Explain Osazone and Lobry de Bruyn–van Ekenstein reactions of monosaccharides
17. Discuss the physical properties of amino acids
