

2012 Scheme

QP CODE: 312006

Reg. No:

Third Year B.Pharm Degree Supplementary Examinations January 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. Write the classification of carbohydrates. Explain mutarotation and Lobry De Bruyn-Van Ekenstein reaction.
2. Discuss important methods of preparation of amino acids. Write a note on physical properties and pharmaceutical importance of amino acids.
3. Write the structural elucidation of Morphine.

Short notes

(14x5=70)

4. Give a brief account on pharmaceutical importance of various carbohydrates.
5. Peptide synthesis.
6. Explain the tertiary structure of protein.
7. Explain isoprene rules.
8. Describe the general isolation procedure of alkaloids.
9. Explain the chemistry and uses of Camphor.
10. Explain the chemistry of Saponins.
11. Classify vitamins and write the structure and pharmaceutical uses of vitamin D.
12. Briefly outline the structural elucidation of Uric acid.
13. Explain on determination of Saponification value of fats and oils.
14. Explain the nomenclature and stereochemistry of steroids.
15. Enumerate the synthesis of progesterone from cholesterol.
16. Write the biological importance of Prostaglandins and Glucagon.
17. Give the structure, biological actions and uses of important synthetic corticosteroids.
