

# 2012 Scheme

QP CODE: 312006

Reg. No: .....

Third Year B.Pharm Degree Supplementary Examinations August 2021

## 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 primary and secondary structure of proteins.
2. Write a note on structure determination of glucose and add an account on pharmaceutical importance of various carbohydrates.
3. Discuss the chemistry of cardiac glycosides with special emphasis on SAR.

### Short notes

(14x5=70)

4. Write the structures of sucrose and lactose. Give a brief note on epimerization.
5. Any two important methods of preparation of amino acids.
6. Define and classify terpenoids with structures.
7. Outline the structural elucidation of ephedrine in brief.
8. Write the structure and pharmaceutical uses of Vitamin D, C and B6.
9. Discuss the interrelationship of caffeine, theobromine and theophylline.
10. Enumerate the method of determination of acid value of fats and oils and add its significance.
11. Explain on stereochemistry of steroids and sketch out the structure of cholesterol and number it.
12. Give a brief outline on structural features of insulin
13. Write the structures and uses of synthetic corticosteroids.
14. Write the structures of any two Prostaglandins and give their biological importance.
15. Explain the chemistry and uses of atropine.
16. Write the structures and therapeutic uses of
  - Estrone      • Progesterone      • Triiodothyronine      • Testosterone
17. Briefly outline the structural elucidation of Vitamin A.

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