

**Third Year B.Pharm(Ayurveda) Degree Supplementary Examinations,
March 2015**

Chemistry of Natural products

Time : 3 Hours

Total Marks:100

- **Answer all questions**

Essays:

(2x10=20)

1. Explain the structure elucidation of any one of tropane alkaloid.
2. Classify terpenoids with special reference to number of isoprene units present. Mention the structures to each class.

Short notes:

(10x5=50)

3. Synthesis of ascorbic acid.
4. Structure and use of any three purines.
5. What are cardenolides and bufadienolides. Mention the structure of each class.
6. Explain the chemical test for alkaloids.
7. Structure elucidation of ephedrine.
8. Outline the synthesis and use of camphor.
9. What are the pharmaceutical importances of carbohydrates.
10. Explain the Ziegl's method and Herzig-Mayer's method in the structural determination of alkaloids.
11. Explain the source and use of oxytocin and vasopressin.
12. Define proteins, classify them with suitable example.

Answer briefly:

(10x3=30)

13. Chemistry of bile acids and salts.
14. Any two non-steroidal estrogens.
15. Synthesis of vitamin D.
16. Illustrate with example how alkaloids are classified on the basis of ring system present.
17. Describe the chemistry and synthesis of any one of the purine alkaloids.
18. Outline the Synthesis of Vitamin A
19. Chemistry of digitalis purpurea.
20. Explain the industrial application of enzymes.
21. Explain the method involved in the determination of methoxyl group present in alkaloids.
22. Draw the structure of any three terpenoids with its uses.
