

**QP CODE: 303008**

**Reg. No.....**

**Third B.Pharm (Ayurveda) Degree Supplementary Examinations April 2018**  
**Chemistry of Natural products**

**Time: 3 Hours**

**Total Marks: 100**

- **Answer all questions**

**Essays:** (2x10=20)

1. Describe the structure and synthesis of uric acid, theobromine and theophylline.
2. Describe about general methods of structural determination and add a note on chemical tests for alkaloids

**Short notes:** (10x5=50)

3. Denaturation of proteins.
4. Describe about nucleoproteins and nucleic acids.
5. Structures of cineol, carvone,  $\alpha$  terpineol.
6. What are xanthenes. How do they differ from purines.
7. Define steroids. Write the nomenclature and skeletal structure of ergo sterol, stigma sterol, cholesterol and diosgenin.
8. Explain about chemistry and uses of ephedrine.
9. Define and name the essential amino acids and write the methods of synthesis of amino acids.
10. Explain about chemistry and uses of atropine.
11. Pharmaceutical importance of methylated xanthenes.
12. How do you identify the steroids and steroidal glycosides

**Answer briefly:** (10x3=30)

13. Define alkaloid and classify them.
14. Halo form reaction.
15. Chemistry of bile acids.
16. Outline the synthesis of  $\alpha$ - ionone.
17. Structure and uses of nitrocellulose.
18. The structure of RNA and DNA.
19. Colour reactions of proteins.
20. Biological sources and uses of oxytocin.
21. Purine and pyrimidine bases.
22. Importance of glycone part with their SAR.

\*\*\*\*\*