

**QP CODE:303008**

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

**Third Year B.Pharm (Ayurveda) Degree Examinations, October 2016**

**Chemistry of Natural products**

**Time : 3 Hours**

**Total Marks:100**

- **Answer all questions**

**Essays:**

**(2x10=20)**

1. Discuss the constitution and synthesis of thiamine
2. What are alkaloids. Explain the general methods for determining the structure of alkaloids

**Short notes:**

**(10x5=50)**

3. Define and classify proteins. Explain the biological importance of conjugated proteins
4. Nucleic acid and their biological importance
5. Outline the synthesis of ephedrine
6. Constitution of ascorbic acid
7. Identification test for steroids
8. Synthesis and medicinal uses of any two non-steroidal oestrogenic agents
9. Structure and biological importance of testosterone
10. Structural features of oxytocin and their biological importance
11. Discuss the nature of prostaglandins and their biological importance
12. Stereochemistry of glucose

**Answer briefly:**

**(10x3=30)**

13. Sources and skeletal structure of carotenes
14. Chemistry of ergo sterol
15. Colour reactions of alkaloids
16. Chemistry of thyroxin
17. Structure and uses of diosgenin
18. Identification test for sapogenins
19. Structure and uses of betamethasone and fluromethylone
20. Isoprene and special isoprene rules
21. General methods of extraction of alkaloids
22. Anabolic steroids and their medicinal applications

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