

**Final Year B.Pharm Degree Supplementary Examinations May 2019**  
**Pharmacognosy – III**  
**(2010 scheme)**

**Time: 3 Hours**

**Total Marks: 100**

- Answer all Questions.
- Draw diagrams wherever necessary.

**Essays**

**(3x10=30)**

1. Discuss the chemistry and biosynthesis of any two diterpenoid compounds of pharmaceutical importance. Explain their pharmacological activity.
2. What is stereoisomerism. Explain the concept and importance of stereoisomerism taking quinine and ephedrine as examples.
3. Explain the biogenesis of hyoscyamine and hyoscine from ornithine. Name any two indole alkaloids with their chemical structure that can be biosynthesized via sikimic acid pathway.

**Short notes**

**(14x5=70)**

4. World – wide trade of herbal drugs containing laxatives
5. Applications of DNA fingerprinting in plant sciences.
6. Biosynthesis of morphine
7. Development and evaluation of poly herbal hair oil.
8. A brief account on future of herbal drug industries in India.
9. Standardization of herbal formulations as per WHO guidelines
10. Mention the applications of plant tissue culture in pharmacognosy
11. Biogenesis of a medicinally important sennoside compound.
12. Discuss the chemistry and pharmacological activity of a cardiac glycoside.
13. An account on endemic plant species of India.
14. Explain various techniques of surface sterilization in plant tissue culture.
15. An account of herbaceous health foods having antioxidant activity.
16. Chemistry and biogenesis of ATROPINE
17. Explain the significance of germplasm conservation

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