

**Final Year B.Pharm Degree Supplementary Examinations May 2018  
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 digitoxin
2. Enlist and explain the different spectral methods with its significance used for the characterization of natural compound
3. Define and explain the need for conservation. Explain in detail the in- situ conservation of the biodiversity. Add a note on threats to biodiversity.

**Short notes**

**(14x5=70)**

4. Give the biological source, chemical constituents and uses of vinca and hyocyamus
5. Discuss the application of plant tissue culture in the production of secondary metabolites with one example
6. Define cosmetics. Briefly describe hair care herbal formulations
7. With biological source discuss the stereo isomerism of cinchona alkaloids
8. Prebiotics and their significance as health foods
9. Briefly describe the evaluation of hemolytic activity as per WHO guidelines.
10. Explain the biogenesis of medicinally important monoterpene
11. Give the chemistry and uses of ergot alkaloids
12. Germ plasm conservation and its importance.
13. Explain briefly the various macronutrients and their role in the preparation of culture media
14. Give the biological source, chemistry and pharmacological activity of morphine.
15. Transgenic plants and their significance
16. Briefly discuss different types of adulteration
17. With the help of diagram explain in detail the various growth phases of callus in culture

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