

**FACULTY OF PHARMACY****B. Pharmacy III-Year I-Semester (Main) Examination, November 2013****Subject : Pharmacognasy - II****Time : 3 Hours****Max. Marks: 70****Note: Answer All questions. All questions carry equal marks.**

- 1.(a)(i) Write the general tests for detection of alkaloids. (6)  
(ii) Give biological source, chemical structures of active constituents of cinchona and nuxvomica. (8)
- OR**
- (b) Mention any one phytopharmaceutical of each belonging to indole and tropane group of alkaloids. Give their biological source, chemical structures and uses. (14)
- 2.(a)(i) Write the definition of glycoside with suitable examples and discuss the general test for glycosides. (8)  
(ii) Write biological source and chemical structure of Digoxin and sennosides. (6)
- OR**
- (b)(i) Write information notes on digitalis. (6)  
(ii) Mention glycosides containing crude drugs. Give biological source chemical structure of chief active constituent and uses of any one crude drug belonging to each of them. (8)
- 3.(a)(i) Discuss the isolation methodology of  
(A) Caffeine from tea and (B) Quinine from cinchona. (6)  
(ii) Write information notes on (A) Taxol (ii) Clove (8)
- OR**
- (b)(i) Define plant tissue culture and discuss the various steps involved in the initiation of callus from an organ explant. (8)  
(ii) What is biotransformation? Write conditions for biotransformation reactions. (6)
- 4.(a)(i) Discuss the immobilized plant cell culture technology. (10)  
(ii) Write about embryogenesis. (4)
- OR**
- (b)(i) Write a note on types of herbal formulations. (8)  
(ii) Discuss on the "Traditional system of medicine and their status in India". (6)
- 5.(a)(i) Describe the phyto pharmaceuticals of commercial significance with examples. (8)  
(ii) Describe the method of preparation with examples of (6)  
(A) Asawas  
(B) Churnas
- OR**
- (b) Discuss about various methods of quality control and standardization of Herbal formulations. (14)

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