

Code No. 4051

FACULTY**B. Pharmacy 3/4 I – Semester (Main) Examination, November 2016****Subject: Pharmacognosy – II****Time: 3 Hrs****Max.Marks: 70****Note: Answer all questions. All questions carry equal marks.**

- 1 a) What are alkaloids. Classify them with suitable examples. 5
b) Write the Biological sources, microscopic features and adulterants of
i) Nuxvomica ii) Cinchona iii) Colchium 9
OR
c) Describe opium under suitable pharmacognostic scheme. 8
d) Write the source, chemical structures of active constituents and use of
i) Belladonna ii) Ephedra iii) Rauwolfia 6
- 2 a) What are cardiac glycosides. Classify and write the chemistry and mechanism of action of digitalis 8
i) Strophanthin ii) Barbaloin 2x3=6
OR
c) Write the biological source, a test for identification and uses of
i) Lycorhizic acid ii) Strophanthoside 3x2=6
d) Describe the pharmacognostic study of Indian senna. 8
- 3 a) Write the isolation and estimation of quinine from cinchona. 6
b) Write a note on Taxus species. 4
c) Write the biological source, chemical nature and uses of
i) Fennel ii) Cinnamon 4
OR
d) Write the chemistry, isolation and estimation of rutin, hesperidin from citrus fruits. 10
e) What are volatile oils, classify with example. 4
- 4 a) Define callus culture, cell suspension culture and give advantages of suspension callus culture. 7
b) Discuss the importance of macronutrients and growth regulators in plant tissue culture media. 7
OR
c) Discuss the application of plant tissue culture in production of secondary metabolites. 7
d) Write about immobilization and its application in plant tissue culture. 7
- 5 a) Give the preparation of Lehyas, Aristas. 7
b) Write about the status and practice of herbal medicine in India. 7
OR
c) Discuss about types of herbal formulation and products. 10
d) Give a note on discovery of new drugs from natural source. 4
