

B. Pharm. 4th Year, 1st Semester Examination 2019

Subject: Pharmacognosy II

Time: Three Hours

Full Marks: 100

(Answer any five questions taking at least two from each group)

Group A

1. Define chromatography. What are the different modes of separation in chromatography? Discuss gradient and isocratic elution process in column chromatography. Describe 2D separation process in planer chromatography. What is bioautography? Discuss the cation and anion exchange process in ion exchange chromatography. What is the principle of separation in paper chromatography?
 $2 + 2 + 2 + 2 + 2 + 8 + 2 = 20$
2. Discuss the role of oxidative free radicals in the pathogenic cell signaling. Write down the role of different herbs in health promotion. Write down the chemical tests for Quinidine, Physostigmine, Ephedrine, and Caffeine.
 $6 + 10 + 4 = 20$
3. Describe the morphological and microscopic features of Rauwolfia root and Nux-vomica seed. Write down the thorough pharmacognostic profile of Ergot. Define pseudo-alkaloids with suitable examples.
 $(5 \times 2) + 7 + 3 = 20$
4. Write notes on
 - a) Isolation of alkaloids from crude extract
 - b) Chemical tests of Opium alkaloids
 - c) Microscopic features of Cinchona bark
 - d) Gel chromatography $6 + 3 + 5 + 6 = 20$

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B. PHARMACY FOURTH YEAR FIRST SEMESTER EXAMINATION – 2019

Subject : PHARMACOGNOSY - II

Time : Three hours

Full Marks : 100

GROUP - B

Instructions: Answer any five questions, taking at least two from each group.

- 5. What is drug evaluation? Explain the various ways how crude drugs can be evaluated in the laboratory? 20**
- 6. What is glycoside? Write in details about Anthraquinone, Isothiocyanate, and bitter glycosides. 20**
- 7. Write short notes on : a) Drug acting of Gastro Intestinal Tract**
b) Evaluation of anti-inflammatory activity of plant extract 20