

FACULTY OF PHARMACY

B. Pharmacy V - Semester (PCI) (Main & Backlog) Examination, April 2024

Subject: Pharmacognosy & Phytochemistry – II

Time: 3 Hours

Max. Marks: 75

PART-A

Note: Answer all the questions.

(10 x 2 = 20 Marks)

1. Define radioisotopes. Give examples of radioisotopes used in tracer techniques.
2. What are the active constituents in Clove and Ginger and their uses
3. Define Flavonoids. Give chemical test used for identification of Flavonoids.
4. What are anthraquinone glycosides. Give chemical test for identification of anthraquinone glycosides.
5. Define resins and give its classification with examples.
6. Give method for isolation of menthol.
7. Give the structure and identification test for quinine.
8. Write the applications of electrophoresis.
9. Write the applications of TLC in phytochemistry.
10. Explain concept of microwave assisted extraction.

PART-B

Note: Answer any two questions.

(2 x 10 = 20 Marks)

11. Explain in detail shikimic acid pathway for biosynthesis for various secondary metabolite.
12. Explain in detail method of isolation, identification and estimation of Caffeine.
13. Write a note on various spectroscopic methods and their application in phytochemistry.

PART-C

Note: Answer any seven questions.

(7 x 5 = 35 Marks)

14. Explain the Isolation, identification and analysis of citral
15. Write in detail about the acetate mevalonate pathway.
16. Write a brief note on various chromatographic methods used in isolation and purification of phytoconstituents.
17. Explain the biological source, chemical tests, chemical constituents and therapeutic uses of opium.
18. Explain Autoradiography in detail.
19. Explain method of isolation, identification and utilization of vincristine and vinblastine.
20. Define alkaloids. Give its classification with examples and general chemical tests.
21. Write the biological source, chemical tests, chemical constituents and therapeutic uses of digitalis.
22. Define tannins. Differentiate between black and pale catechu.
