PHARMACOGNOSY & PHYTOCHEMISTRY – II
(GUESS PAPER 2025–26)

SECTION A (10 × 2 = 20)
1. Define primary and secondary metabolites with examples.
2. Differentiate TLC and HPTLC.
3. Write chemical test for cardiac glycosides.
4. Define tannins and write their chemical test.
5. Write biological source and uses of Artemisinin.
6. Write identification test for Quinine.
7. Differentiate infusion and decoction.
8. Write biological source and uses of Clove.
9. Define chromatography with example.
10. Write applications of chromatographic techniques.

SECTION B (Attempt any TWO – 2 × 10 = 20)
1. Explain Shikimic acid biosynthetic pathway in detail.
2. Discuss application of chromatographic techniques in standardization of herbal drugs.
3. Explain industrial production, estimation and utilization of Caffeine and Forskolin.
4. Explain modern methods of extraction of crude drugs.

SECTION C (Attempt any FIVE – 5 × 7 = 35)
1. Describe isolation and analysis of Podophyllotoxin.
2. Discuss biosources, constituents and uses of Opium and Digitalis.
3. Explain isolation, identification and analysis of Quinine.
4. Describe industrial production and utilization of Sennosides and Digoxin.
5. Write note on application of spectroscopic techniques in quality control of herbal drugs.
6. Explain tracer technique and role of radioactive isotopes in biogenetic studies.
7. Discuss pharmacognosy of Rauwolfia with extraction of Reserpine.

■ QUESTION FREQUENCY ANALYSIS (2019–2025)

Topic	Times Asked	Exam Weight
Shikimic Acid Pathway	7 / 7	■■■■■
Chromatographic Techniques	6 / 7	■■■■■
Isolation of Alkaloids (Atropine/Reserpine)	6 / 7	■■■■
Sennosides & Digoxin	6 / 7	■■■■
Podophyllotoxin	5 / 7	■■■■
Caffeine / Forskolin	5 / 7	■■■■
Tracer Technique	5 / 7	■■■■
Spectroscopic Techniques	4 / 7	■■■