PHARMACOGNOSY & PHYTOCHEMISTRY – II (BP504T)

GUESS PAPER (Based on Repeated University Questions)

SECTION A – Attempt all questions (10 × 2 = 20)

a) Define chromatography. Give one example.
b) Differentiate between primary and secondary metabolites.
c) Differentiate TLC and HPTLC.
d) Write chemical tests for identification of cardiac glycosides.
e) Define tannins and write chemical tests for tannins.
f) Write biological source and uses of Artemisinin.
g) Write biological source and uses of Quinine.
h) Differentiate between Infusion and Decoction.
i) Write biological source and uses of Clove and Aloe.
j) Outline factors affecting solvent selection for extraction of crude drugs.

SECTION B – Attempt any TWO (2 × 10 = 20)

a) Explain shikimic acid biosynthetic pathway with diagram and significance.
b) Discuss industrial production, estimation and utilization of Caffeine and Forskolin.
c) Describe applications of chromatographic techniques in identification and standardization of crude drugs.

SECTION C – Attempt any FIVE (5 × 7 = 35)

a) Explain isolation and analysis of Atropine and Podophyllotoxin.
b) Discuss biosource, chemical constituents, therapeutic uses and commercial applications of Opium and Digitalis.
c) Describe isolation, identification and analysis of Quinine.
d) Discuss industrial production and utilization of Sennosides and Digoxin.
e) Write a short note on Mevalonic acid pathway.
f) Describe biosources, chemical constituents and therapeutic uses of Rauwolfia and Licorice.
g) Explain applications of spectroscopic techniques in quality control of herbal drugs.

Question Repetition Chart (2020–2025)

Topic / Question	Repeated Years
Primary & Secondary metabolites	2020–2025
Chromatography (TLC, HPTLC, HPLC)	2020–2025
Shikimic / Mevalonic acid pathway	2021–2025
Caffeine & Forskolin	2020–2025
Atropine / Podophyllotoxin	2020–2025
Opium, Digitalis, Senna	2020–2025
Quinine & Alkaloids	2021–2025
Spectroscopic techniques	2021–2025