



**PHARMACOGNOSY AND PHYTOCHEMISTRY-V**

(Phytopharmaceutical/Herbal Technology)

**Paper-5**

Time : Three Hours]

[Maximum Marks : 80

**N.B. :-** (1) Q. No. 1 is compulsory.

(2) Attempt any **four** questions from remaining.

(3) Draw neat labeled diagrams wherever necessary.

1. Solve any **five** of the following :

- Define and classify alkaloids with examples.
- Write a note on Global market for herbal products and opportunities in India.
- Write a note on Ergot.
- Write in short importance of standardization & problems involved in it.
- Write a note on *Parriflora incarnata*.
- Write biological source chemical constituents and uses of Raman Chamomile.
- Write a note on *Rauwolfia*.

5×4=20

2. State the role of medicinal & aromatic plants in national economy along with the importance of natural products for drug development. 15

3. (a) What is herbal drug interaction ? Mention its classification. State the interaction of Ginkgo biloba and ginger. 8

(b) Define Flavonoids. Give classification chemistry and extraction of Flavonoids. 7

4. (a) Outline the biosynthesis of Tropane alkaloid. 8

(b) Give the Pharmacognostic account of Cinchona Bark. 7

5. (a) Explain any one method for Antidiabetic & Antioxidant screening of herbal drug formulations. 10

(b) Give complete pharmacognostic account of Liquorice. 5

6. (a) Give the procedure for extraction, Isolation and estimation Atropine. 8

(b) Write a note on WHO guidelines for quality standardised herbal drugs and formulation. 7

7. Write short notes on (any **three**) :

- Patenting of Herbal drugs
- Steroid alkaloids
- Validation of herbal products.
- Biosynthesis of Indole alkaloids.
- Green Tea.

5×3=15