

**B. Pharm. Seventh Semester (C.B.S.) Examination**  
**PHARMACOGNOSY AND PHYTOCHEMISTRY-V**  
**(Phyto-pharmaceuticals/Herbal Technology)**

**Paper-5**

Time : Three Hours]

[Maximum Marks : 80

- N.B. :**— (1) Question No. 1 is compulsory.  
(2) Attempt any **FOUR** questions from the remaining.  
(3) Draw neat labeled diagram wherever necessary.

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

- (a) Describe various antidiabetic screening methods for herbal drugs and formulations.
- (b) Give the pharmacognostic accounts on Passiflora incarnata.
- (c) Define flavonoids and classify them with suitable examples of each class.
- (d) Give the general chemical test of alkaloids and its therapeutic uses.
- (e) Give the biological source, chemical constituents, chemical test and uses of Kurchi Bark.
- (f) Write a short note on Green Tea.
- (g) Give the biological source, chemical constituents, chemical test and uses of Nux Vomica Seed.

5×4=20

- 2. (a) Define alkaloids. Give its classification with suitable examples of each class. Write an account on general methods of extraction of alkaloids. 8
- (b) Give the pharmacognostic account on opium. 7
- 3. (a) Describe the various methods of extraction, isolation and estimation of Atropine. 10
- (b) Describe the various drug interactions of Ginger and Ginseng. 5
- 4. (a) What is standardization ? Enlist the various methods for standardization of herbal drugs as per WHO Guidelines. Describe in detail morphological and microscopical methods of evaluation of crude drugs. 10
- (b) Write note on Licorice. 5

5. (a) What is screening of herbal drugs and formulation ? Describe in detail various screening methods for anti-oxidant studies of herbal drugs. 10
- (b) Give the biological source, chemical constituents, chemical tests and uses of Gingko. 5
6. (a) Describe the pharmacognostic accounts on Ergot. 8
- (b) Describe the various methods of extraction, isolation and estimation of Atropine. 7
7. Write short notes on any **three** :
- (1) Biosynthetic pathways of tropane alkaloids
- (2) Patenting of Herbal drugs
- (3) Problems in discovering new drugs from higher plants
- (4) Herbal drug interaction
- (5) Pharmacognosy of Vinca. 5×3=15