



PHARMACOGNOSY AND PHYTOCHEMISTRY-IV

(Recent Advances in Phytochemistry)

Paper-4

Time : Three Hours]

[Maximum Marks : 80

N.B. :- (1) Question No. 1 is compulsory.

(2) Solve any **FOUR** questions from remaining.

(3) Draw neat labelled diagram wherever necessary.

1. (a) Give the chemical tests for Tannins.
(b) Write a note on cynogenetic glycosides.
(c) Write any four chemical tests for identification of tannins.
(d) Give the chemical test for Digitalis.
(e) Give examples of Bitter glycosides and write the biological source, chemical constituents, uses of Kalmegh.
(f) Give the biological source, chemical constituents, uses of Myrobalan.
(g) Write collection and preparation of Aloe. 5×4=20
2. (a) Define Glycoside. Classify them with suitable example of each class. Describe in detail the extraction and isolation of Glycosides. 8
(b) Give the spectral studies of any one of following phytochemicals :
(i) Digoxin 7
(ii) Gallic acid 7
3. Define tannins. Give classification with examples and general methods of extraction. Give the pharmacognostic note on pale catechu. 15
4. Give the biological source, chemical constituents, chemical test and uses of (any three) :
(a) Senna 15
(b) Amala
(c) Liquorice
(d) Black mustard
(e) Shatavari
5. Write a short note on any three of the following :
(a) Cardioactive Glycoside
(b) Isolation and purification of Andrographolide
(c) Extraction and purification and estimation of Ginkgolides
(d) Brahmi
(e) Ashoka bark 15
6. (a) Describe in detail procedure of extraction, isolation, purification and estimation of Hesperidin. 7
(b) Write a pharmacognostic note on Arjuna bark. 8
7. (a) Describe in detail extraction, isolation, purification and estimation of any one of the following :
(i) aleoin 10
(ii) bacoside 5
(b) Write pharmacognostic note on Bahera.