

**B.Pharm. Sixth Semester (C.B.S.) Examination**  
**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. Solve any *five* :

(A) Write isolation method of glycosides.

(B) Write a note on bitter glycosides.

(C) Give biological source, chemical constituents and uses of Bahera.

(D) Write chemical test for identification of different types of Aloe.

(E) Write short note on Shatavari.

(F) Give chemical test for identification of tannins.

(G) Write a note on rhubarb.

4×5=20

2. Write extraction, isolation and purification of Bacosides and Hesperidin.

15

3. (A) What are tannins ? Give classification and chemistry of tannins.

8

(B) Write pharmacognostic account on Black Catechu.

7

4. Write the procedure for isolation, purification and therapeutic uses of Diosgenin and Andrographolide.

15

5. Define and classify glycosides with examples. Give complete pharmacognostic account on Senna.

15

6. (A) Write biogenetic pathway for cardiac glycosides.

8

(B) Give complete pharmacognostic account on Digitalis.

7

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

(A) Spectral studies on Glycyrrhizin

(B) Flavonoid glycosides

(C) Myrobalan

(D) Brahmi.

5×3=15