

**First/Second/Third/Fourth/Fifth/Sixth  
Semester Examination for the Degree of  
Bachelor of Pharmacy**

**PHARMACOGNOSY AND PHYTOCHEMISTRY – IV**

**6T/4**

Time : Three Hours ]

[ Max. Marks : 80

- N. B. : (1) Question No. 1 is compulsory.  
 (2) Attempt any four questions from the remaining.  
 (3) Draw neat labelled diagram wherever necessary.  
 (4) Discuss the reaction, mechanism wherever necessary.  
 (5) Use of electronic calculator is permitted.  
 (6) Assume suitable data wherever necessary.

1. Write short notes on (any **five**) :—
  - (a) Differentiate between black catechu and pale catechu.
  - (b) Write a note on anthraquinone glycosides.
  - (c) Write isolation method of glycosides.
  - (d) Write a note on myrobalan.
  - (e) Write a note on Shatavari.
  - (f) Write a note on flavonoids. 5×4=20
  
2. (a) Write classification and chemistry of tannins with suitable examples. 8  
 (b) Write pharmacognostic accounts on Black catechu and pale catechu. 7

3. Write pharmacognostic accounts on Aloe and Digitalis. 15
  
4. Write isolation, purification and therapeutic uses of Andrographolide and Diosgenin. 15
  
5. Write extraction, isolation, purification and estimation of Aloin and Hesperidin. 15
  
6. Write spectral characterization of Glycyrrhizin and Andrographolide. 15
  
7. Write short notes on (any **two**) :—
  - (a) Kalmegh
  - (b) Bahera
  - (c) Brahmi. 7.5×2=15