

**NTK/KW/15-6973**

**First Semester Examination for the Degree  
of Bachelor of Pharmacy**

**PHARMACOGNOSY AND PHYTOCHEMISTRY –  
I**

**Paper – I T 5**

Time : Three Hours ]

[ Max. Marks : 80

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

1. Short answer question. (Any Five) :—
  - (a) Define Ayurveda ? Explain in brief Tridosha.
  - (b) Write about contributions of the Charaka and Galen in the history of pharmacognosy.
  - (c) Give chemical tests for tannins.
  - (d) What are secretory tissue system ?
  - (e) Define saponins ? What are the basic physical and chemical properties of saponins ?
  - (f) Explain in brief any two methods for preparation of crude drugs for market.
  - (g) What are barks ? Give the microscopical characteristics of barks with example.  $4 \times 5 = 20$
2.
  - (a) What do you mean by quality and purity of crude drugs ? Add a note on Exogenous factors affecting on the quality of crude drugs. 5
  - (b) What are organized crude drugs ? Explain characteristics of leaves. 5

NTK/KW/15-6973

Contd.

- (c) Define vascular bundle. Write the nature and functions of xylem and phloem. 5
3. (a) What are plant metabolites ? Explain in details study of basic metabolic pathways and formation of different primary metabolites with example. 10
- (b) What are carbohydrates ? Add a note on types of carbohydrates. 5
4. (a) What are secondary plant metabolites ? Explain shikimic acid pathway for formation of different secondary metabolites. 10
- (b) What are Alkaloids ? Explain how alkaloids as secondary metabolites are useful for medicinal purpose. 5
5. (a) Explain about endogenous factors affecting quality and purity of crude drugs. 10
- (b) Write the basic Principle, Diagnosis, Symptoms and treatment of Unani System of Medicine. 5
6. Write a short notes on following. (Any **Three**) :—
- (i) Adulteration
- (ii) Aromatherapy
- (iii) Stomata
- (iv) Glycosides
- (v) Roots and Rhizomes 15
7. Describe different systems of classification of crude drugs with their advantages and disadvantages. 15