NKT/KS/17/6544

B.Pharm. Semester—I (C.B.S.) Examination

PHARMACOGNOSY AND PHYTOCHEMISTRY–I

Paper—5

Time : Three Hours] [Maximum Marks : 80

Note :— (1) Question No. **1** is compulsory.

(2) Solve any **four** questions from the remaining.

(3) Draw neat labelled diagrams wherever necessary.

(4) Discuss the reaction, mechanism wherever necessary.

1. Answer the following questions (any **five**) :

(a) Differentiate between Primary and Secondary metabolite.

(b) Define and classify carbohydrates with suitable examples of each class.

(c) Write a note on Epidermal trichomes.

(d) Give the various chemical tests for detection of Alkaloids.

(e) Give the general morphological and histological characters of Leaf.

(f) Describe Unani System of medicine.

(g) Define and classifly proteins. Give the various chemical tests for detection of proteins. 5×4=20

2. Define Pharmacognosy. Explain various systems of classification of crude drugs with their advantages and disadvantages. 15

3. (a) Enlist the various alternative and complementary systems of medicine. Describe in detail about Ayurvedic System of medicine. 10

(b) Define adulteration. Describe different methods of adulteration. 5

4. Describe in detail various Exogenous factors affecting the quality and purity of crude drugs. 15

5. (a) Write in detail about the contribution of various scientists in the development of pharmacognosy. 8

(b) Describe different types of stomata. 7

6. (a) Describe and name the different secondary metabolites that are formed through shikimic acid pathways. 8

(b) Write about the different steps involved in preparation of crude drugs. 7

7. (a) Write short notes on any **two** of the following :

(i) Histology of Bark

(ii) Xylem and Phloems

(iii) Fruits

(iv) Chinese system of medicine. 8

(b) Explain formation of different primary metabolites through photosynthesis. 7