

DIPLOMA IN PHARMACY (FIRST YEAR)
PHARMACOGNOSY
(103)

Time : Three Hours

Maximum Marks : 80

Note : (i) Attempt total six questions. Question No. 1 is compulsory. From the remaining questions attempt any five.

(ii) Illustrate your answers with neat sketches wherever necessary.

1. Attempt any five of the following : 10

(a) Define Alkaloids. Write the role of alkaloids in plants.

(b) Match the following :

(i) Antihypertensive (A) Rhubarb

(ii) Laxatives (B) Punarnava

(iii) Diuretics (C) Sylvestra

(iv) Antidiabetics (D) Rauwolfia

(c) Define the following with example :

(i) Oxytocics

(ii) Astringents

(d) Write the main chemical constituents and uses of the following :

(i) Vinca

(ii) Curcuma

(e) Write biological source and family of the following :

(i) Cinchona

(ii) Colchicum

P. T. O.

- (f) Write the name of any *two* drugs belonging to family Liliaceae with their uses.
- (g) Explain the following :
 - (i) Palisade ratio
 - (ii) Stomata index

2. Attempt any *four* of the following : 14

- (a) Enlist various systems of classification of crude drugs. Explain any *two* of them.
- (b) Define evaluation of crude drugs. Write name of various type of evaluation with brief note of microscopic evaluation.
- (c) How various type of alkaloids are extract from crude drug? Give flow chart of steps involved.
- (d) What is glycosides? Write chemical test for anthraquinon glycoside.
- (e) Explain the following chemical tests :
 - (i) Match-stick test
 - (ii) ~~Keller~~ Keller-Killiani test

3. Attempt any *four* of the following : 14

- (a) Differentiate between Alexandrian senna and Tinnavelly senna.
- (b) Write biological source, cultivation, collection and preparation of Digitalis.
- (c) Write biological source, main chemical constituents and adulterants for Belladonna.
- (d) What are antitussives? Describe any *two* antitussive drugs briefly.
- (e) What are Vitamins? Write a brief note on shark liver oil.

4. Attempt any *four* of the following : 14

- (a) What are antiseptics and disinfectants ?
Write chemical test for Sumatra Benzoin and Siam Benzoin.
- (b) Differentiate between 'East Indian Oil' and 'West Indian oil'.
- (c) Give different chemical tests for resins.
- (d) Name the drug having the following chemical constituents and explain any *one* of them :
 - (i) Emetine
 - (ii) Vasicine
 - (iii) Strychnine
 - (iv) Rhein
- (e) What are various pharmaceutical aids ?
Name such *four* aids with their brief description.

5. Attempt any *two* of the following : 14

- (a) Define and classify terpenoids. How are they extracted ? Mention identification test for terpenoids.
- (b) Draw a well labelled diagram of T. S. of Ipecac root or Nux vomica seed and describe the same.
- (c) Describe the complete pharmacognosy of Ergot.

6. Describe official source, family, chemical constituents and uses of any *four* of the following : 14

- (a) Black catechu

- (b) Gokhru
- (c) Papaya
- (d) Opium
- (e) Aswagandha
- (f) Asafoetida

7. Attempt any *four* of the following : 14

- (a) Write a note on stabilization and preservation of crude drugs.
- (b) Classify surgical fibres. Differentiate between absorbent and non-absorbent cotton.
- (c) What are gums and mucilages ? Give official source, chemical constituents and uses of Ispaghula and Guar gum.
- (d) Define and classify volatile oils with suitable examples.
- (e) Define sutures. What are its ideal requirements ?
- (f) Write a brief note on Guggul.

8. Write short notes on any *four* of the following : 14

- (a) Antidiabetics
- (b) Antirheumatics
- (c) Carminatives
- (d) Enzymes
- (e) Perfumes and flavouring agents