

## B.Pharm 6th Semester Exam., 2018

## PHARMACOGNOSY—V (CNP)

Time : 3 hours

Full Marks : 70

## Instructions :

- (i) The marks are indicated in the right-hand margin.
- (ii) There are **NINE** questions in this paper.
- (iii) Attempt **FIVE** questions in all.
- (iv) Question No. 1 is compulsory.

1. Answer the following (any seven) :  $2 \times 7 = 14$

(a) How phenolic and alcoholic groups are distinguished in natural products?

(b) Give source and use of Ergometrine.

(c) What are lignans?

(d) Define stereoisomerism.

(e) Penicillin  $\xrightarrow{\text{Penicillanase}}$  ?

(f) Give examples of triterpenoids.

(g) State whether true or false :

- (i)  $\alpha$ -carotene is optically active.
- (ii) Xanthophylls' esters are epiphanic carotenoids.
- (iii) Vitamin A-2 is hydrogenated from A-1.

(h) Define the following with suitable examples :

- (i) Oils and fats
- (ii) Carbohydrates
- (iii) Isolation

(i) Name the constituents of biuret reagents.

(j) Streptomycene is isolated from \_\_\_\_\_.  
(Fill in the blank)

2. (a) Discuss various spectral approaches which are followed to identify simple molecules of natural origin. 7

(b) Discuss stereoisomerism taking examples of natural products. 7

\*3. Discuss chemistry and pharmacology activity of monoterpenes. Differentiate between sesquiterpenes and diterpenes. 14

4. Discuss in detail about the chemistry and pharmacological activity of Digoxin. 14

5. What are lignans? Discuss the chemistry and pharmacological activity of medicinally important lignans. 14

6. Write down the chemistry and pharmacological activities of any two of the following : 7+7=14

(a) Quinine

(b) Morphine

(c) Vinca alkaloids

7. Differentiate between terpenes and terpenoids. Describe structure elucidation of terpenes. 14

8. Classify alkaloids. Write in detail about the isolation of alkaloids. 14

9. (a) Write a note on chemistry of cardiac glycoside. 7

(b) Give a detailed chemistry of vitamin A. 7

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