

Total No. of Questions : 6]

SEAT No. :

P1987

[5145]-405

[Total No. of Pages : 2

Second Year B.Pharm.

PHARMACOGNOSY AND PHYTOCHEMISTRY - II

(2013 Pattern) (Semester - IV)

Time : 3 Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) *All Questions compulsory.*
- 2) *Figures to right indicate full marks.*
- 3) *Answer to the two sections should be written in separate answer books.*
- 4) *Draw neat labelled diagrams wherever necessary.*

SECTION - I

Q1) Define Alkaloids, protoalkaloids and pseudoalkaloids. Explain pharmacognosy of a Quinoline alkaloid. **[10]**

OR

Classify Alkaloids on the basis of its chemical nature. Discuss pharmacognostic account of narcotic Isoquinoline Alkaloid. **[10]**

Q2) Answer any five of the following: **[5 × 3 = 15]**

- a) Write biosynthesis for Tropane Alkaloid.
- b) Discuss adultrants of Rauwolfia.
- c) Write chemical tests for identification of Alkaloids.
- d) Describe chemical constituents of Claviceps perpuria.
- e) Draw labelled diagram of T.S. of Priwinkle leaf.
- f) Describe chemical properties of Alkaloids.
- g) Discuss chemical constituents and uses of Holarrhena.

P.T.O.

Q3) Solve Any Two of the following: **[2 × 5 = 10]**

- a) Note on artificial method of cultivation of Ergot.
- b) Explain microscopy and uses of stem containing Amino alkaloid.
- c) Write extraction, isolation and identification test for purin alkaloids.
- d) Explain method of extraction and isolation for Strychnin and Brucin.

SECTION - II

Q4) Define and classify Terpenoids. Write in detail methods of extraction of volatile oils. **[10]**

OR

Describe the detail pharmacoonostic account of Commiphora. **[10]**

Q5) Answer any Five of the following: **[5 × 3 = 15]**

- a) Compare between Podophyllum root and rhizome.
- b) Describe chemical constituents and uses of Ginger.
- c) Describe method of cultivation and collection of Kalmi Dalchini.
- d) Draw T.S. of Clove bud.
- e) Explain uses of Artemissia.
- f) Give importance of Optical activity.
- g) Note on Clavenger apparatus.

Q6) Discuss on Any Two of the following: **[2 × 5 = 10]**

- a) Sandalwood.
- b) Taxol.
- c) Boswellia.
- d) Analysis of volatile oils.

