

2013

## PHARMACOGNOSY

*Time Allotted : 3 Hours*

*Full Marks : 70*

*The figures in the margin indicate full marks.*

*Candidates are required to give their answers in their own words  
as far as practicable.*

### GROUP – A

#### ( Multiple Choice Type Questions )

1. Choose the correct alternatives for any ten of the following :

10 × 1 = 10

i) Bronchodialating effect of *Adhatoda vasica* is due to

- a) adhatotic acid
- b) vasicine
- c) vasicinone
- d) none of these.

ii) Narcotic effect of nutmeg is due to

- a) myristicin
- b) elimicin
- c) safrole
- d) all of these.

iii) The esters of unsaturated fatty acids of hydrocarpic acid  
are available in

- a) clove oil
- b) chaulmoogra oil
- c) mustard oil
- d) eucalyptus oil.

iv) What colour is produced when Zanzibar aloe is treated  
with nitric acid ?

- a) Yellowish brown
- b) Pale brownish
- c) Deep brownish red
- d) Brown changes to green colour.

v) Withanolides are found in

a) ashwagandha

b) hyoscyamus

c) rhubarb

d) aconite.

vi) Vinca alkaloids are isolated from

a) Catharanthus roseus and contain indole and  
indoline moiety

b) Rosco chromogens and contain indole and indoline  
moiety

c) Catharanthus roseus and contain quinoline  
quinaldine

d) Catharanthus indicus and contain indole and  
quinoline alkaloids.

vii) What type of trichome is present in vasaka leaf ?

a) Covering      b) Glandular

c) Hydathode      d) both (a) and (b).

viii) Which one of the following drugs contains 'Proto'  
alkaloids ?

a) Colchicum      b) Ephedrine

c) Atropine      d) both (a) and (b).

ix) Ailanthus glandulosa is the adulterant of which of the  
following drugs ?

a) Aconite      b) Ephedra

c) Belladonna      d) Opium.

x) Colchicine gives yellow colour with

a) ferric chloride      b) hydrochloric acid

c) sulphuric acid      d) sodium hydroxide.

xi) Shark liver oil, when treated with chloroform and

sulphuric acid, it acquires

- a) light purple changing to brown to violet
- b) light brown changing to purple to violet
- c) light violet changing to purple to brown
- d) light violet changing to brown to purple.

xii) Van-Urk's reagent is chemically

- a) methylaminodibenzaldehyde
- b) methylaminobenzaldehyde
- c) p-dimethylaminobenzaldehyde
- d) p-dimethylbenzaldehyde.

### **GROUP – B**

#### **( Short Answer Type Questions )**

Answer any three of the following  $3 \times 5 = 15$

2. Differentiate between fixed oil and volatile oil.
3. Write a note on the method of cultivation and collection of latex from opium poppy.
4. Explain the various parameters of microscopic evaluation of leaf drugs.
5. Define crude drug. Write a short note on morphological and chemical classification of crude drugs. 1 + 2 + 2
6. Explain the morphology of coriander fruit with the help of a neat labelled diagram.

### **GROUP – C**

#### **( Long Answer Type Questions )**

Answer any three of the following.  $3 \times 15 = 45$

7. What is purgative ? Mention the biological source, chemical constituents, morphology, microscopy and use of any one stimulant purgative. Mention the biological source,

preparation and morphology of 4 types of aloe.

8. What is the biological source of Digoxin ? Write a pharmacognostic note on the plant which is the source of Digoxin. What are the different glycosides present in Digitalis purpurea ? What is Keller-Killiani test ? 1 + 6 + 5 + 3

9. What is the source of Ergol ? Explain its life cycle with diagrammatic representation. Mention its morphology, chemical nature and uses. 2 + 10 + 3

10. Define drug adulteration. Explain the various types of commonly used adulterants in place of original crude drugs and what are the various techniques to maintain the purity & quality of original crude drugs ? 2 + 5 + 8

11. Write short notes on any three of the following :  $3 \times 5$

- a) Active constituents of Linchora and its uses
- b) Chinese system of Medicine (Principle)
- c) Chemical constituents and uses of Vinea and Chaulmoogra oil
- d) The part used, biological source, chemical constituents and use of Neem.

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