



Name : .....

Roll No. : .....

Invigilator's Signature : .....

**CS/B.PHARM (OLD)/SEM-8/PT-802/2012**

**2012**

**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) Purine nucleus of Caffeine is the fusion of

- a) Pyridine and piperidine
- b) Pyrimidine and Pyridine
- c) Imidazole and Pyrimidine
- d) Imidazole and Pyrrolidine.

ii) Therapeutically relevant part of Physostigma is

- a) Seed
- b) Leaf
- c) Root
- d) Bark.

iii) Which of the following does not contain Morphine ?

- a) *P. somniferum*
- b) *P. orientale*
- c) *P. bracteatum*
- d) *P. dubium*.

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[ Turn over



- iv) Henbane is the synonym of  
a) Pilocarpus                      b) Kurchi  
c) Datura                              d) Hyocyamus.
- v) ..... alkaloids are often found to be present as Meconic acid derivatives.  
a) Tropane                              b) Opium  
c) Pilocarpine                          d) Indole.
- vi) Periwinkle contains ..... alkaloid.  
a) Opium                                  b) Pilocarpine  
c) Tropane                                d) Indole.
- vii) Betel nut contains  
a) Lobeline                                b) Arecoline  
c) Pilocarpine                          d) Physostigmine.
- viii) The family of Kurchi is  
a) Rubiaceae                              b) Rutaceae  
c) Leguminosaea                        d) Apocynaceae.
- ix) Herb(s) possessing antitumor activity is  
a) Vinca                                      b) Colchicum  
c) both of these                        d) None of these.
- x) Calabar bean is the synonym of  
a) Colchicum                                b) Physostigma  
c) Coffee                                    d) Areca nut.
- xi) Solanaceae is the family of  
a) Colchicum                                b) Ashwagandha  
c) Areca                                      d) Lobelia.





7. a) Describe in brief, various steps involved from authentication of drug to preparation of final extract using soxhlet extractor.
- b) Which type of drugs cannot be extracted by soxhlation and why ?

**GROUP - C**

**( Long Answer Type Questions )**

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

8. a) Write down the biological sources, chemical constituents and uses of any three of the following :
- i) Vinca,                      ii) Belladonna                      iii) Coffee
- iv) Kurchi                      v) Physostigma.
- b) Write down the chemical test(s) for identification of Opium alkaloids.  $(3 \times 4) + 3$
9. a) Write short note on Column chromatography and its role in phytochemical studies.
- b) What are TLC, HPTLC and preparative TLC ?
- c) What are the advantages of HPTLC over TLC ?
- d) What are the various methods of detection in TLC ?  $6 + 4 + 1 + 4$
10. a) Define and classify alkaloids with suitable examples.
- b) Explain extraction procedure for alkaloids.
- c) Give example of two liquid alkaloids and two colored alkaloids.  $9 + 4 + 2$
11. Write short note on the following :
- a) Mevalonic acid pathway & biosynthesis of isoprenoid.
- b) Aromatic biosynthesis via Shikimic acid pathway.
12. Write down the complete plant profile of any *one* of the following :  $15$
- i) Datura      OR      ii) Colchicum.