Code No: BP405T   PCI   SET - 1

II B. Pharmacy II Semester Regular Examinations, April/May - 2019
PHARMACOGNOSY AND PHYTOCHEMISTRY-I

Time: 3 hours   Max. Marks: 75

Note: 1. Question Paper consists of three parts (**Part-I**, **Part-II & Part-III**)
       2. Answer ALL (Multiple Choice) Questions from **Part-I**
       3. Answer any **TWO** Questions from **Part-II**
       4. Answer any **SEVEN** Questions from **Part-III**
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PART –I

1. (i)   What is the name of naturally occurring Auxin in plant?   (1M)
           (a) 1-napthaleneacetic acid (NAA)
           (b) 2,4-Dichlorophenoxyacetic acid (2,4-D)
           (c) Indole 3-acetic acid (IAA)
           (d) 1-napthoxyacetic acid (NOA)

   (ii)   Media room of a plant tissue culture lab should consist of the following.   (1M)
           EXCEPT…?
           (a) pH meter   (b) Autoclave machine
           (c) Analytical balance (d) Biosafety cabinet

   (iii)   In a cell, protoplast consists of the following EXCEPT...?   (1M)
           (a) Cell wall (b) Cell membrane (c) Nucleus (d) Cytoplasm

   (iv)   Which of the following is a fixed oil?   (1M)
           (a) Castor oil   (b) Lemongrass oil   (c) Clove oil   (d) Eucalyptus oil

   (v)   Hybridoma cells are   (1M)
           (a) Non anchorage dependent and cannot grow in suspension culture
           (b) Non anchorage dependent and can be grown in suspension culture
           (c) Anchorage dependent and can be grown in suspension culture
           (d) Anchorage dependent and cannot grow in suspension culture

   (vi)   A plant cell placed in hypotonic solution will   (1M)
           (a) Shrink   (b) Undergo plasmolysis
           (c) Swell up and become turbid   (d) Swell up and burst

   (vii)   …………. is an example of an un organized drug.   (1M)
           (a) Senna leaf   (b) clove bud   (c) Gum tragacanth   (d) cinnamon bark

   (viii) Keller-Killiani test is performed for the identification of …………   (1M)
           (a) Alkaloids (b) Steroids   (c) Glycosides   (d) Carbohydrates

   (xi)   Example of substitution with exhausted drug is   (1M)
           (a) Senna   (b) Clove   (c) Opium   (d) Saffron

   (x)   Hagersreagent contains ………..   (1M)
           (a) Potassium mercuric iodide
           (b) Potassium bismuth iodide
           (c) Potassium iodide and iodine
           (d) Picric acid

   (xi)   Which of the following is the identification test for saponin glycosides?   (1M)
           (a) Olive oil test   (b) Foam test   (c) Both a&b   (d) None of the above

   (xii)   ………… belong to the Volatile Oils.   (1M)
           (a) Dill   (b) cinchona   (c) Senna   (d) Datura

(xiii)   Which of the following is statements is true for glycosides   (1M)
(a) They always give glucose on hydrolysis
(b) Sugars are always connected to aglycon via ether bond
(c) They give positive reaction to Molisch reaction
(d) DNA is not a glycoside

(xiv)   ……………… is an example of a secondary metabolite.   (1M)
(a) Glucose   (b) adenine   (c) atropine   (d) arginine

(xv)   Gelatin is …………..   (1M)
(a) Glycoside   (b) Protein   (c) Fat   (d) Terpene

(xvi)   Function of aglycone is……………   (1M)
(a) Transportation (b) Therapeutic activity (c) Respiration (d) Photosynthesis

(xvii)   …………… always contains polyhydroxy phenolic groups   (1M)
(a) Alkaloids   (b) glycosides   (c) tannins   (d) terpenes

(xviii) Hydrolysable tannins gives……….. color with tannins   (1M)
(a) Pink   (b) yellowish red   (c) bluish black   (d) brownish green

(xix)   Gold beaters skin test is conducted for ………………   (1M)
(a) Alkaloids (b) Saponins   (c) Tannins (d) Flavanoids

(xx)   The example of pseudoalkaloid….   (1M)
(a) Caffeine   (b) nicotine   (c) Arecoline   (d) Lobeline

PART –II

2.   a)   Write about the factors affecting the cultivation of medicinal plants.   (5M)

     b)   Write a note on Polyploidy, mutation and hybridization.   (5M)

3.   Explain the principle, procedure, advantages and disadvantages involved in the   (10M)
          taxonomical classification, morphological and pharmacological classification of
          crude drugs.

4.   a)   What are Carbohydrates? Classify them with examples and write about the   (5M)
          chemical tests used for the identification of carbohydrates.

     b)   Explain the pharmacognosy of agar.   (5M)

PART –III

5.   Discuss the chemical tests used for identification of glycosides.   (5M)

6.   Write short notes on   (5M)
          (i) Stomatal index   (ii) Palisade raion

7.   Write a note on Serratiopeptidase.   (5M)

8.   Explain the principles and significance of Ayurveda system of medicine.   (5M)

9.   What are alkaloids? Classify them with examples. Write chemical tests used for   (5M)
          identification of alkaloids.

10.   Write a note on hallucinogens.   (5M)

11.   Write about the pharmacognosy of papain.   (5M)

12.   Write short notes on bees wax.   (5M)

13.   Write about the pharmacognosy of casein.   (5M)