

Duration: 3 hours

Total marks: 75

N.B.: 1. Answer all questions sequentially.

2. Figures to right indicate full marks.

Q. 1 Choose appropriate option for following multiple choice questions. 20

1. Classification based on protein content is called
 - a Taxonomical Classification
 - b Morphological classification
 - c Chemical classification
 - d Serotaxonomical classification

2. The gum which contains oxidase enzyme is
 - a Tragacanth
 - b Honey
 - c Acacia
 - d Agar

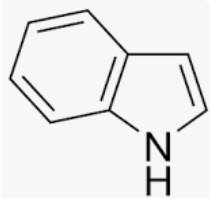
3. Ash value is done in order to determine
 - a Inorganic contaminants
 - b Organic contaminants
 - c Microbial contaminants
 - d Pesticidal contaminants

4. Vein islet number is
 - a Total number of vein islets beneath each epidermal cell
 - b Total number of vein islets beneath mesophyll
 - c Total number of vein islets in 1mm^2 of epidermal cells.
 - d Average number of vein islets beneath four continuous epidermal cells

5. Multiplication of entire chromosome set alters the quality of crude drugs produced with a change in the active constituents in the process of_____.
 - a Polyploidy
 - b Mutation
 - c Chemodemes
 - d Hybridization

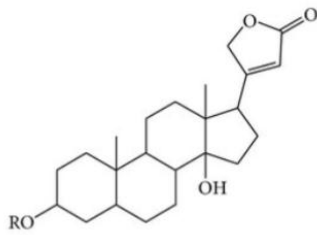
6. The natural plant growth regulator useful in promoting lateral bud development and inhibition of senescence by preventing the breakdown of chlorophyll in leaves are_____.
 - a Auxins
 - b Gibberellins
 - c Cytokinins
 - d Abscissic acid

- 7 The method of collection of heartwood from the plant
- Ploughing and uprooting
 - Plucking and stripping
 - Felling and cutting
 - Tapping
- 8 The protection and conservation of species in their natural habitat called as _____
- In-situ conservation
 - Ex-situ conservation
 - Off-site conservation
 - No conservation
- 9 Which of the following is Indole derivative?
- Cytokinins
 - Abscisic acid
 - Auxins
 - Gibberellins
- 10 In plant tissue culture, the callus can be differentiated into a complete plantlet by altering the concentration of _____
- Sugars
 - Hormones
 - Amino Acids
 - Vitamins and minerals
- 11 Part of the plant used for sub culturing in tissue culture is called as
- Explant
 - Callus
 - Hormone
 - Stock
- 12 Panchmahabhutha and Tridosha theory is related to
- Homeopathy
 - Unani
 - Ayurveda
 - Chinese
- 13 Identify the class of compound from the given basic nucleus



- Tropane Alkaloids
- Indole Alkaloids
- Quinoline Alkaloids
- Cardiac Glycosides

- 14 Identify the class of compound from the given basic nucleus



- a Anthraquinone glycoside
b Cardiac glycoside
c Flavonoid
d Tropane alkaloid
- 15 Tannins are confirmed by which of the following tests?
a Bortrager's test
b Modified Bortrager's test
c Keller Killiani test
d Goldbeater's skin test
- 16 Jute is an example of fibre belonging to the class of
a Regenerated fibre
b Mineral fibre
c Carbohydrate fibre
d Protein fibre
- 17 Pollens and spores are examples of
a Teratogens
b Hallucinogens
c Natural allergens
d Artificial allergens
- 18 Out of the following which one is an example of fibrinolysis activating enzyme
a Papain
b Serratiopeptidase
c Urokinase
d Bromelain
- 19 The example of mucilage from marine source is
a Agar
b Acacia
c Castor
d Honey
- 20 The proteolytic enzyme derived from the bacteria present in the gut of silk worm
a Urokinase
b Streptokinase
c Serratiopeptidase
d Pepsin

Q.IIA Answer ANY TWO of the following: 20

1a. Explain the significance of chromatography and moisture content in the identification of DONO. 10

1b. Write in detail about factors influencing cultivation of medicinal plants.

2a. Enlist various methods of preparation of edible vaccine along with their applications. 10

2b. Draw the heterocyclic nucleus/ general structure and write one example with its use and chemical test for the following phytoconstituents:

i. Tropane alkaloid

ii. Anthraquinone glycosides

3a. Classify fibres based on source. Discuss carbohydrate fibers in detail with applications. 10

3b. Explain source, preparation, chemical constituents, chemical tests and uses of Acacia.

Q.IIB Answer ANY SEVEN out of nine 35

1. Give biological source, chemical constituent, and method of preparation and identification tests of any fixed oil having cathartic properties. 5

2. Draw the heterocyclic nucleus/ general structure and write one example with its use and chemical test for the following phytoconstituents 5

i. Flavonoid

ii. Volatile oil

3. Define plant tissue culture and its applications. Explain in detail callus culture. 5

4. With the help of suitable examples, explain the role of polyploidy, mutation and hybridization with reference to medicinal plants. 5

5. Write a note on chemo-taxonomical and alphabetical classification of DONO 5

6. Write a note on leaf constants for quantitative microscopy. 5

7. Discuss any two proteolytic enzymes obtained from Plant source. 5

8. Write a note on Adulteration of Drugs with suitable examples. 5

9. Define and Classify Tannins with suitable examples, Give their chemical tests for identification , 5
