

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 the following multiple choice questions. 20M

1 _____ classification includes classification of organised and unorganised drugs.

- a Morphological
- b Pharmacological
- c Chemical
- d Chemo-taxonomical

2 Lycopodium spore method can be performed in the

- a leaf drugs only
- b powdered drugs with well-defined particles which may be counted
- c any powdered drugs
- d unorganised drugs only

3 _____ is an organoleptic evaluation parameter.

- a Odour
- b Melting point
- c Moisture content
- d Foaming index

4 Following statements are true for unorganised drugs; except

- a Unorganised drugs have cellular structure.
- b Unorganised drugs do not have morphological structure.
- c Unorganised drugs are obtained from natural sources.
- d Unorganised drugs can be solid, semisolid or liquid.

5 Coppicing is

- a method of collection of bark
- b type of vegetative propagation
- c plant tissue culture technique
- d method of sowing the seeds

6 Raphides are bundles of

- a prismatic crystals
- b compound starch
- c acicular crystals
- d Phloem fibers

7 Following are the exogenous factors; except

- a Hybridization
- b Altitude
- c Temperature
- d Soil

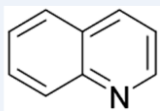
8 Change in DNA sequence is called as

- a Grafting
- b Polyploidy
- c Formation of callus
- d Mutation

- 9 Following are the types of plant tissue culture technique except
- a Garbling culture
 - b Anther culture
 - c Suspension culture
 - d Protoplast culture/
- 10 _____ are transgenic plants which trigger an immune response to provide immunity against particular infectious diseases.
- a Allergens
 - b Edible vaccines
 - c Polyploids
 - d Mutants
- 11 _____ is the pericyclic fibre.
- a Jute
 - b Cotton
 - c Dextrin
 - d Hemp
- 12 _____ is the natural growth inhibiting substance present in plants.
- a Auxins
 - b Abscisic acid
 - c Polyamines
 - d Ethylene
- 13 Pollens are _____ type of allergens
- a inhalants
 - b contact
 - c ingestants
 - d injectants
- 14 Which of the following constituent in tragacanth is responsible for swelling & forming gel?
- a Tragacanthin
 - b Bassorin
 - c Tragacanthic acid
 - d Amylose
- 15 _____ is obtained from *Ananas comosus*
- a Papain
 - b Streptokinase
 - c Bromelain
 - d Serratiopeptidase
- 16 _____ is heated at 80 degree centigrade for removal of toxic principle.
- a Sunflower oil
 - b Chaulmogra oil
 - c Castor oil
 - d Arachis oil

- 17 Foam test is done for
 a Saponins
 b Volatile oils
 c Anthraquinones
 d Flavonoids

- 18 Following structure represents



- a Catechol
 b Quinoline
 c Anthraquinone
 d Indole

- 19 _____ is produced by fermentation technology

- a Papain
 b Urokinase
 c Serratiopeptidase
 d Pepsin

- 20 Astringent action is shown by

- a Tannins
 b Glycosides
 c Volatile oils
 d Steroids

Q. II A Answer ANY TWO of the following:

20M

- 1a Give biological source, chemical constituent and identification test for Gelatin.
 Draw the heterocyclic nucleus/ general structure and write one example with its use & chemical test for the following phytoconstituents:

5M

- 1b
 i. Cardiac glycoside
 ii. Hydrolysable tannin

5M

- 2a Write a note on

5M

- i. Ash value and its significance in quality control of DONO
 ii. Effect of altitude & temperature in cultivation of DONO with suitable examples.

- 2b Define plant tissue culture & give its applications in Pharmacognosy.

5M

- 3a Comment on significance of drying of crude drugs with suitable examples.
 Discuss various methods used for drying in detail.

5M

- 3b Write biological source, preparation, chemical test for identification and uses of Jute.

5M

- Q.II.B Answer ANY SEVEN out of the Nine 35 M**
- 1 Give Complete Pharmacognosy of mucilage containing drug obtained from marine source. **5M**
- 2 Define Volatile oil. Discuss the different classes of volatile oil and its chemical test with examples. **5M**
- Write a note on
- 3 i. Biodiversity. **5M**
ii. Cytokinins
- 4 Give salient features and applications of edible vaccine. **5M**
- 5 Discuss chemical classification of drugs of natural origin with suitable examples along with the merits & demerits of the same. **5 M**
- 6 Write a note on types of adulteration with suitable examples **5M**
- 7 Discuss Urokinase and Papain in detail. **5M**
- 8 Write a note on significance of Pharmacognosy in various alternative systems of medicine. **5M**
- 9 Draw the heterocyclic nucleus/ general structure and write one example with its use, chemical test for the following phytoconstituents: **5M**
- i. Flavonoid glycoside
ii. Indole alkaloid
