

# Question Paper

Exam Date & Time: 13-Jul-2023 (02:00 PM - 05:00 PM)



## MANIPAL ACADEMY OF HIGHER EDUCATION

Pharmacognosy and Phytochemistry - I [PCO-BP405T-S1]

Marks: 75

Duration: 180 mins.

### I Multiple Choice Questions (MCQs)

Answer all the questions.

Section Duration: 30 mins

- 1) Gum Acacia appears in the form of \_\_\_\_\_ (1)
- [Tears](#)
- [Angular masses](#)
- [Flattened masses](#)
- [Cylindrical pieces](#)
- 2) Aleurone grains are present in \_\_\_\_\_ (1)
- [Barks](#)
- [Stem](#)
- [Seed](#)
- [Leaf](#)
- 3) Indeterminate organ culture is \_\_\_\_\_ (1)
- [Leaf culture](#)
- [Flower culture](#)
- [Ovule culture](#)
- [Node culture](#)
- 4) Example for Cultures of multiple cell origin \_\_\_\_\_ (1)
- [Protoplast culture](#)
- [Anther culture](#)
- [Callus culture](#)
- [Pollen culture](#)
- 5) The capability of a cell to regenerate into a whole plant is termed as \_\_\_\_\_ (1)
- [Cryopreservation](#)
- [Totipotency](#)
- [Biotransformation](#)
- [Immobilization](#)
- 6) Embryo culture was first established by \_\_\_\_\_ (1)
- [Kuster](#)
- [Haning](#)
- [Bergmann](#)
- [Jones](#)

- 7) Borntrager's test gives a positive reaction for \_\_\_\_\_ (1)
- [Tropane alkaloids](#)  
[Saponin glycoside](#)  
[Cardiac glycosides](#)  
[Anthraquinone glycoside](#)
- 8) Murexide test is a specific test for which of the following alkaloids (1)
- [Indole](#)  
[Purine](#)  
[Quinoline](#)  
[Isoquinoline](#)
- 9) Nectar is present in \_\_\_\_\_ (1)
- [Flower](#)  
[Fruit](#)  
[Seed](#)  
[Honey](#)
- 10) Sucrose on hydrolysis gives Glucose and \_\_\_\_\_ (1)
- [Glucose](#)  
[Fructose](#)  
[Galactose](#)  
[Rhamnose](#)
- 11) Who is known as the "father of modern genetics" (1)
- [Greenish & Collin \(1904\)](#)  
[Seydler \(1815\)](#)  
[Gregor Johann Mendel \(1865\)](#)  
[Berg \(1865\)](#)
- 12) Which of the following is a fungal growth? (1)
- [Saffron](#)  
[Colophony](#)  
[Musk](#)  
[Ergot](#)
- 13) Pheromones from Gypsy moth (1)
- [7,15-Hexadecadien4-olide](#)  
[7,8-epoxy-2-methyl octadecane](#)  
[L-Isoleucine methyl ester](#)  
[2-methyl-3-buten-2-ol](#)
- 14) Group of plants of a species which have identical morphological characters, but differ in their chemical nature are called as (1)
- [Mutation](#)  
[Polyploidy](#)  
[Chemotaxonomy](#)  
[Chemodemes](#)
- 15) Plant growth inhibitor but not involved in fruit ripening process (1)
- [Ethylene](#)

- [Abscisic acid](#)
- [Ethephon](#)
- [2,4-Dichlorophenoxy acetic acid](#)
- 16) Which alkaloid factory is established in Darjeeling (West Bengal)? (1)
- [Opium alkaloid factory](#)
- [Cinchona alkaloid factory](#)
- [Vinca alkaloid factory](#)
- [Ergot alkaloid factory](#)
- 17) Which of the following is **not** the Principle of Ayurveda (1)
- [Sapta-Dhatu theory](#)
- [Three dosha theory](#)
- [Minimum dose theory](#)
- [Pancha Mahabhuta theory](#)
- 18) "Majja" in Ayurveda meaning (1)
- [Muscles and Tendons](#)
- [Marrow](#)
- [Fat](#)
- [Blood](#)
- 19) Antineoplastic agent obtained from Marine source *Bugula neritina* (1)
- [Bryostatins](#)
- [Cytarabine](#)
- [Octopamine](#)
- [Fludarabine](#)
- 20) Fibers regenerated from ground nut protein (Peanut fibre) (1)
- [Fibrolin](#)
- [Nylon](#)
- [Ardil](#)
- [Orlon](#)

## II Long Answers

Answer all the questions.

- 1) Give a descriptive note on various plant hormones. (10)
- 2) Describe the physical method of evaluation of Crude drugs. (10)

## III Short Answers

Answer all the questions.

- 1) Discuss in detail Chemical classification of crude drugs with sufficient examples. Mention its merits and demerits. (5)
- 2) Write a note on time of collection of different parts of plants with suitable examples. (5)
- 3) Give an account on Historical developments of plant tissue culture. (5)
- 4) Explain the basic principles involved in Homeopathy. (5)
- 5) What are Alkaloids. Classify them with examples. (5)
- 6) What are Carbohydrates. Explain the chemistry of Carbohydrates. (5)
- 7) Give a descriptive note on cotton with special reference to source, chemical composition, method (5)

of preparation and uses.

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