

# Question Paper

Exam Date & Time: 22-May-2023 (10:00 AM - 01:00 PM)



## MANIPAL ACADEMY OF HIGHER EDUCATION

Herbal Drug Technology [PCO-BP603T-S1]

Marks: 75

Duration: 180 mins.

### I Multiple Choice Questions (MCQs)

Answer all the questions.

Section Duration: 30 mins

- 1) Which of the following is "**NOT**" a WHO guideline for the GMP of herbal medicines? (1)
- [Complaints](#)
  - [Personnel](#)
  - [Biodynamic agriculture](#)
  - [Personal hygiene](#)
- 2) Which of the following is "**NOT**" a free radical? (1)
- [Singlet oxygen](#)
  - [Hydroxylamine](#)
  - [Super oxide anion](#)
  - [Hydroxyl ion](#)
- 3) Spirulina belongs to the family (1)
- [Spirulinaceae](#)
  - [Microcoleaceae](#)
  - [Macrocoleaceae](#)
  - [Plantaceae](#)
- 4) Kavain is the constituent of which of the following crude drug? (1)
- [Kava](#)
  - [Ephedra](#)
  - [Rauwolfia](#)
  - [Ginger](#)
- 5) Ephedra decreases the activity of (1)
- [Aspirin](#)
  - [Digoxin](#)
  - [Sennosides](#)
  - [Insulin](#)
- 6) Glucosinolates are obtained from which of the following vegetables? (1)
- [Legume](#)
  - [Cruciferous](#)
  - [Umbelliferous](#)
  - [None of](#)

- [these](#)
- 7) CDRI and NBRI are located in which place of India? (1)
- [Nagpur](#)  
[Mumbai](#)  
[Bangalore](#)  
[Lucknow](#)
- 8) CRI is involved in the research of which of the following crude drugs? (1)
- [Clove](#)  
[Fennel](#)  
[Cardamom](#)  
[Tobacco](#)
- 9) Safi is manufactured by the Lab (1)
- [Hamdard](#)  
[Himalaya](#)  
[Dabur](#)  
[Zandu](#)
- 10) The annual turnover of the Indian herbal drug industry in Crores is (1)
- [3,200](#)  
[2,300](#)  
[3,300](#)  
[4,300](#)
- 11) Swelling index is applicable for the crud drugs that contain (1)
- [Tannins](#)  
[Saponins](#)  
[Bitters](#)  
[Mucilage](#)
- 12) Term of trade Secret in terms of years is (1)
- [Ten](#)  
[Twenty](#)  
[Thirty](#)  
[Infinite](#)
- 13) The following sweat glands which secretes the body odour (1)
- [Mucous](#)  
[Sebaceous](#)  
[Eccrine](#)  
[Epocrine](#)
- 14) Which of the following oil is virtually identical to human sebum? (1)
- [Coconut](#)  
[Sunflower](#)  
[Olive](#)  
[Jojoba](#)
- 15) The factor responsible for building viscosity is (1)
- [Increase drug absorption](#)

- [Inhibit the crystal growth](#)  
[Increase re-dispersibility of the sediments](#)  
[All of the above](#)
- 16) Hausner's ratio is used for evaluation of (1)
- [Lotion](#)  
[Syrup](#)  
[Tablet](#)  
[Emulsion](#)
- 17) Lawsone is coloring compound obtained from (1)
- [Hibiscus](#)  
[Annatto](#)  
[Henna](#)  
[Avacado](#)
- 18) Which of the following is does not holds good for Excipients? (1)
- [Active ingredients in the formulation](#)  
[Aid in processing of drug delivery system](#)  
[Protect and enhance stability](#)  
[Assist in product identification](#)
- 19) ASU drugs having no expiry date, record should be maintained up to how many years of the exhausting stock? (1)
- [Five](#)  
[Four](#)  
[Three](#)  
[One](#)
- 20) Minimum sq feet area required for setting up ASU Medicine manufacturing unit is (1)
- [1000](#)  
[1050](#)  
[1100](#)  
[1200](#)

## II Long Answers

**Answer all the questions.**

- 1) Give a detailed account of preparation and standardization of Leha and Churna with examples. (10)
- 2) Write the procedure involved in the determination of Bitterness value and Tannin content of crude drugs as per the WHO guidelines. (10)

## III Short Answers

**Answer all the questions.**

- 1) Briefly discuss the basic principles involved in Ayurveda. (5)
- 2) Give the role of Nutraceuticals in Diabetes. (5)
- 3) Write the Institutes involved to work on medicinal plants in India with their location and roles. (5)
- 4) Define and explain briefly the policy process of Bioprospecting. (5)
- 5) Define, classify and give the advantages of Cosmetics. Write about fixed oils (ANY TWO) used in skin care. (5)
- 6) Define and write the advantages of Novel dosage forms with a note on Ethosomes. (5)

- 7) What is Schedule-T of ASU drugs and enumerate its principles. Add a note on Water supply and Disposable of waste. (5)

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