

# Question Paper

Exam Date & Time: 19-May-2023 (10:00 AM - 01:00 PM)



## MANIPAL ACADEMY OF HIGHER EDUCATION

Manipal College of Pharmaceutical Sciences

MAHE, Manipal

B.Pharm Semester VIII , End Sem Examination May 2023

**Quality Control and Standardization of Herbals [PCO-BP806ET-S2]**

**Marks: 75**

**Duration: 180 mins.**

### I Multiple Choice Questions (MCQs)

**Answer all the questions.**

Section Duration: 30 mins

- 1) Magnesium turning is used for which of the following test? (1)
- Vitali morin test  
Hagers test  
Shinoda test  
Liebermann-Burchard test
- 2) Modified Borntrager's test is carried out for (1)
- Indole alkaloids  
Purine alkaloids  
Cyanogenic glycosides  
Anthracene glycosides
- 3) Lignified tissue is stained with (1)
- Ruthenium red solution  
Potassium hydroxide solution  
Phloroglucinol and HCl  
Copper sulphate solution
- 4) Which of the following crude drug answers test for Alkaloid? (1)
- Isabgol  
Vinca  
Fennel  
Cassia
- 5) Silica crucible is used for determination of (1)
- Swelling index  
Foaming index  
Bitterness value  
Ash value
- 6) ASU drugs related provisions are described in chapter (1)

IV A  
IV B  
IV C  
IV D

7) Long-term stability testing for herbal products to be stored at room temperature are (1)

25°C±2°C / 60%RH ±5%RH for 6 months  
25°C±2°C / 60%RH ±5%RH for 12 months  
25°C±2°C / 75%RH ±5%RH for 6 months  
25°C±2°C / 75%RH ±5%RH for 12 months

8) Ayurvedic Pharmacopoeia of India came to existence in (1)

1992  
1983  
2010  
1962

9) Misbranded drugs has been defined and is under the section (1)

33E  
33EE  
33EEA  
33EEB

10) Acceptance criteria indicates which of the following limits in quality control of herbal drugs? (1)

Numerical  
Alphabetical  
Therapeutic  
All of these

11) Which of the following is "NOT" a part of Herbal preparations? (1)

Tinctures  
Extracts  
Expressed juices  
Isolated compounds

12) Tests, procedures, acceptance criteria, and limits are described under (1)

Standardization  
Specifications  
Markers  
None of these

13) Control of herbal substances and preparations are as per the guidelines of (1)

CIMAP  
CHMP  
NBRI  
CFTRI

14) Human healthy volunteers are involved in which of the following phase? (1)

III  
II  
I

#### **IV**

- 15) The finished goods transferred from the production area after proper packing shall be stored in the finished goods stores, marked as (1)

Finished goods stock  
Quarantine  
Finished product  
None

- 16) Fresh plant materials should be ideally stored at (1)

2 - 8 °C  
10 - 15 °C  
20 - 30 °C  
35 - 40 °C

- 17) Fertilizers should be applied sparingly to minimise (1)

Erosion  
Leaching  
Tillage  
Weeds

- 18) National GLP compliance monitoring authority was established by DST India in the year (1)

1972  
1970  
2002  
2010

- 19) Following is the environmental factor in GACP does not come under CLIMATE (1)

Radiation  
Temperature  
Mutation  
Altitude

- 20) The domesticated, locally adapted, distinct identity of a traditional variety of species is known as (1)

Ecotype  
Chemotype  
Phenotype  
Landraces

#### **II Long Answers**

**Answer all the questions.**

- 1) a) Define adulteration. Mention different types of adulteration with examples. (1+5) (10)  
 b) Determination of foreign matter. (4M)
- 2) Explain role of Chemical and Biological markers in standardization of Herbal products (10)

#### **III Short Answers**

**Answer all the questions.**

- 1) Write a note on Comparison of Indian Herbal and British Herbal Pharmacopoeia (5)  
 2) Explain HPLC is a tool for standardization and quality control of herbal drugs (5)

- |    |   |     |
|----|---|-----|
| 3) | Define drug stability. Explain the physical degradation that occurs during the storage of a product | (5) |
| 4) | Discuss briefly the Phase I and Phase II of clinical trials of herbal medicines.                    | (5) |
| 5) | Briefly explain on general considerations of herbal medicine research                               | (5) |
| 6) | Describe the GLP (NGCMA) formation, scope, and certification in India                               | (5) |
| 7) | Write briefly about good harvesting and collection practices as per GACP                            | (5) |

-----End-----