



Avinashilingam Institute for Home Science and Higher Education for Women

Deemed to be University Estd. u/s 3 of UGC Act 1956, Category 'A' by MHRD (now MoE)

Re-accredited with 'A++' Grade by NAAC. CGPA 3.65/4, Category I by UGC

Coimbatore - 641 043, Tamil Nadu, India

Continuous Internal Assessment Test I – February 2025

Semester-II

Class : I PG

Major : BC/BT/Chem/FSMD

Time : 2 hours

Maximum Marks : 60

23MBOI01 – Microbial Technology and Herbal drugs

Course Outcomes:

- CO1. Analyze various secondary metabolites present in plants through preliminary screening tests
CO2. Observe the various natural colourants, nutritive and non-nutritive sweeteners and their principle
CO3. Understand the various types of drugs
CO4. Understand and apply the staining techniques for identification of microorganisms
CO5. Assess the serial dilution, Plate streaking, antimicrobial activity

Part- A

(6 x 1 = 6)

Choose the correct answer

1. Which bioactive compound in *Gymnema sylvestre* helps reduce sugar absorption ? **CO1K1**
a. Saponins b. Gymnemic acid c. Flavonoids d. Alkaloids
2. What role do saponins in *Dioscorea deltoidei* play in cardiovascular health ? **CO1K3**
a. Acts as anticoagulants b. Lower Cholesterol level
c. Increase platelet aggregation d. Induce vasoconstriction
3. Which plant is the biological source of saffron **CO2K1**
a. *Crocus sativus* b. *Bixa orellana* c. *Beta vulgaris* d. *Lawsonia inermis*
4. Which of the following sweeteners is chemically classified as a glycoside? **CO2K1**
a. Saccharin b. Stevioside c. Sucralose d. Aspartame
5. Which non-nutritive sweetener is widely used for diabetic patients? **CO3K3**
a. Sucrose b. Aspartame c. Stevioside d. Fructose
6. Chavanprash is an example for _____ **CO3K1**
a. Asava b. Asava c. Taila d. Lepa

Part- B

(3x6=18)

Answer the following. Answer should not exceed 400 words or one page

7. a. Give the biological activity of *Phyllanthus amarus* **CO1K1**
OR
b. Give the medicinal uses of *Dioscorea deltoidea* **CO1K1**
8. a. Explain the colouring principle of saffron **CO2K2**
OR
b. Explain stevioside a natural sweetener **CO2K2**
9. a. Describe any two dosage forms **CO3K2**
OR
b. Explain the phytochemicals present in *Gymnema sylvestre* **CO3K2**

Part- C

Answer the following

3x12=36

Answer should not exceed 800 words or four pages

10. a. Explain the phytoconstituents pharmacological activity of *Vinca rosea*. **CO1K2**
OR
b. Explain the pharmacological activity of *Dioscorea deltoidea* **CO1K2**
11. a. Explain any one biological source and colouring principle of turmeric. **CO2K2**
OR
b. Explain about any two nonnutritive sweeteners. **CO2K2**
12. a. Explain about any 3 drugs developed from plants and its derivative. **CO3K2**
OR
b. Explain the standardization of herbal products. **CO3K2**