

KAMARAJ COLLEGE (Autonomous)

Accredited with A+ Grade by NAAC

(Affiliated to Manonmaniam Sundaranar University, Tirunelveli)

(3 Pages)

Reg. No:.....

Question Code: 26E00914

Course Code: 25USB024

UG Degree - End Semester Examinations, April 2026

Second Semester

B.Sc., BOTANY

Herbal Medicine

(For those who joined in June 2025 onwards)

Time : 3Hours

Maximum : 75 Marks

PART - A (10 × 1 = 10 Marks)

Answer ALL Questions

Choose the correct answer :

CO:1 1. Who coined the term "Pharmacognosy"?

- K: 1
- (a) Schmidt (b) Dioscorides
(c) Galen (d) Aristotle

CO:1 2. Which method is used to identify a drug based on its taste, odor and color?

- K: 2
- (a) Microscopical evaluation (b) Chemical evaluation
(c) Organoleptic evaluation (d) Physical evaluation

CO:2 3. Which medicinal plant is widely used to treat skin burns and wounds in home gardens?

- K: 1
- (a) *Ocimum sanctum* (b) *Aloe vera*
(c) *Gloriosa superba* (d) *Catharanthus roseus*

CO:2 4. *Gloriosa superba* is mainly cultivated for which of the following?

- K: 2
- (a) Its leaves for tea (b) Its flowers for perfume
(c) Its tubers for colchicine (d) Its stem for wood

CO:3 5. Which method is most effective for extracting Eucalyptus oil to prevent the degradation of its temperature-sensitive compounds?

- K: 1
- (a) Steam distillation (b) Expression
(c) Maceration (d) Sublimation

- CO:3 6. In water distillation (hydro-distillation), where is the plant
K: 2 material placed?
- (a) Directly in the boiling water (b) On a perforated grid above the water
- (c) In a separate steam generator (d) In a vacuum chamber
- CO:4 7. Which of the following is classified under the "Rhizome" category
K: 1 of crude drugs?
- (a) *Vetiveria zizanioides* (b) *Santalum album*
- (c) *Acorus calamus* (d) *Cinnamomum verum*
- CO:4 8. *Santalum album* (Sandalwood) is primarily used in medicine for
K: 2 its _____
- (a) Bark (b) Heartwood
- (c) Root (d) Rhizome
- CO:5 9. *Coleus amboinicus* belongs to the family _____
K: 1
- (a) Solanaceae (b) Lamiaceae
- (c) Apiaceae (d) Rutaceae
- CO:5 10. The chief active constituent of Neem seed is _____
K: 2
- (a) Nicotine (b) Azadirachtin
- (c) Quinine (d) Strychnine

PART - B (5 X 5 = 25 Marks)

Answer ALL Questions choosing either (a) or (b).

Answer should not exceed 250 words.

- CO:1 11. (a) Analyse the core components of Indian system of medicine.
K: 3
- (OR)**
- (b) Classify the crude drugs with examples.
- CO:2 12. (a) How to establish a medicinal gardening at home? Explain
K: 4 with examples.
- (OR)**
- (b) Give a short note on cultivation methods of *Aloe vera*.
- CO:3 13. (a) Outline the experimental setup and stepwise procedure for
K: 3 water distillation.
- (OR)**
- (b) Illustrate the extraction process of Eucalyptus oil.

CO:4 14. (a) Discuss the morphology and pharmacological activity of
K: 4 *Hemidesmus indicus*.

(OR)

(b) Distinguish *Santalum album* and *Cinnamomum verum* with its medicinal uses.

CO:5 15. (a) Analyze the chemical constituents and medicinal uses of
K: 4 *Coleus amboinicus*.

(OR)

(b) Categorize the chemical constituents and their therapeutic uses of *Phyllanthus niruri*.

PART - C (5 X 8 = 40 Marks)

Answer ALL Questions choosing either (a) or (b).

Answer should not exceed 500 words.

CO:1 16. (a) Describe the importance of herbal drugs.
K: 5

(OR)

(b) Define Pharmacognosy and explain its scope.

CO:2 17. (a) Elaborate the importance of establishing a medicinal garden
K: 6 in hilly regions.

(OR)

(b) Discuss the cultivation techniques for *Gloriosa superba*.

CO:3 18. (a) Explain the working principles of steam distillation.
K: 6

(OR)

(b) Describe the process of essential oil extraction from clove.

CO:4 19. (a) Explain about the medicinal and therapeutic uses of *Vetiveria*
K: 3 *zizanioides*.

(OR)

(b) Describe the biological source, chemical constituents and uses of *Zingiber officinale*.

CO:5 20. (a) Discuss the botanical description, active principles and uses
K: 5 of *Piper nigrum*.

(OR)

(b) Explain the botanical description, active principles and uses of *Andrographis paniculata*.