Reg. No ..... Name **25U679**

B. Sc. DEGREE END SEMESTER EXAMINATION - MARCH 2025

SEMESTER 6 : BOTANY

COURSE : **19U6CRBOT13 : PHYTOCHEMISTRY AND PHARMACOGNOSY (EL)**

(For Regular 2022 Admission and Supplementary 2021/2020/2019 Admissions)

Time : Three Hours Max. Marks: 75

PART A

Answer All (1 mark each)

1. Define adulteration.
2. Define organoleptic approach in studying phytochemicals.
3. Name any two plant families that possess tetracyclic triterpenoids.
4. By which pathway triterpenoids are synthesized in plants?
5. Name two ayurvedic formulations with Withania somnifera.
6. Name an aromatic plant with volatile oil.
7. Define hot extraction.

(1 x 7 = 7)

PART B

Answer any 10 (2 marks each)

8. Write the chemical compounds present in geranium oil.
9. Name any two quinoline group of alkaloids.
10. Differentiate between morphological and microscopic evaluation methods of adulteration.
11. Write a note on Galathamine.
12. What are the major functions of phenolics in plants.
13. Write the scientific name of the following plants a. Malabar nut b. Poppy
14. Differentiate between starch grains of wheat and potato?
15. Name any two tropane group of alkaloids.
16. Explain how you utilize microscopy in the study of phytochemicals.
17. Write the phytochemicals present in Phyllanthus niruri.
18. Write down the chief pharmacological action of artemisinin.
19. Write the chemical compounds present in rose oil.

(2 x 10 = 20)

PART C

Answer any 4 (6 marks each)

20. Write a note on Asava and Rasa rasayan.
21. Explain the pharmacological uses of triterpenoids.
22. Describe the microscopic methods in pharmacognosy to study starch grains of potato and Curcuma.
23. Write a short account on the structure of alkaloids.
24. Write an account on the uses of a)Syzygium aromaticum b) Santalum album.
25. Mention any four anatomical features in the identification of the organoleptic part of Achyranthes aspera.

(6 x 4 = 24)

PART D

Answer any 2 (12 marks each)

26. Describe the anatomical, phytochemistry and pharmacological uses of Kaempheria galanga, Sida acuta and Carica papaya.
27. Explain the structure, principle and method of extraction using Clevenger apparatus.
28. Describe the part used, uses and method of extraction of the following plants: a) Rosa b) Vetiveria c) Pelargonium

(12 x 2 = 24)