

Note: This question paper contains two parts A and B.

Part A is compulsory which carries 25 marks. Answer all questions in Part A.

Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

PART-A

(25 Marks)

- 1.a) How will you identify Alkaloids on the basis of chemical test? [2]
- b) Write down the two uses of Rauwolfia. [3]
- c) Classify glycosides with example? [2]
- d) What are cardiac glycosides? Explain. [3]
- e) How will you measure growth in Plant tissue culture? [2]
- f) How will you establish Plant tissue culture? [3]
- g) Give the chemical constituents of Taxol. [2]
- h) Write down the active constituents of Neem. [3]
- i) Write down the health benefits of Garlic. [2]
- j) Give the chemical constituents of Ginkgo. [3]

PART-B

(50 Marks)

- 2.a) Write in detail about microscopy and morphology of Ipecac. [5+5]
- b) Give the diagnostic features and adulterants of Duboisia.

OR

- 3. Write in detail pharmacognostic study about Nux-Vomica. [10]

- 4. Give the test for identification of Glycosides. [10]

OR

- 5. Give the chemical constituents and substitutes of Dioscorea. [10]

- 6. Explain the different types of Plant tissue culture with example. [10]

OR

- 7. What do you mean by Plant tissue culture? Explain. [10]

- 8. Give the chemical nature with structure of Camptothecin. [10]

OR

- 9. Give the Biological Source and uses of Artemisinin. [10]

- 10. Write a short note on anticancer drugs obtained from marine sources. [10]

OR

- 11.a) Define functional foods and Nutraceuticals with example. [5+5]
- b) Write down the name of marker compounds of Spirulina.