Draw neat, labeled diagrams wherever necessary.

NG ESSAY (Answer any Three)

- 1. Discuss in detail current good agricultural practices and its impact on quality of herbal drugs.
- 2. Describe general methods for isolation and purification of Marine toxins.
- 3. What are Nutraceuticals? Enlist various categories of Nutraceuticals with examples and their health benefits.
- 4. Discuss in detail the WHO guidelines for safety monitoring of natural medicines and reporting schemes for biodrug adverse reactions.

SHORT ESSAY (Answer any Nine)

9 X 5 = 45 Marks

3 X 10 = 30 Marks

- 5. Explain Ex-situ techniques for medicinal plant conservation.
- 6. Write a short note on Good collection practice.
- 7. Write a note on recent advances in marine drug research.
- 8. Explain FSSAI guidelines for Nutraceuticals.
- 9. Give the source, name of the marker compound, chemical nature, medicinal uses and health benefits of i) Soya bean and ii) Flax seed.
- 10. Explain the method for isolation of Rutin.
- 11. Write the source, chemical nature, medicinal and health benefits of Limonoids.
- 12. Write the source and method of isolation of Andrographolide.
- 13. Explain bio drug-drug interactions with suitable examples.
- 14. Give the method of isolation of Vascine.

