



**NG ESSAY (Answer any Three)**

**3 X 10 = 30 Marks**

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**

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.

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