

Duration: Three Hours

Marks: 100

- N.B. : 1. All Questions are **compulsory**.
 2. **Figures** to the **right** indicate full marks.
 3. **Draw** neat and labelled diagrams wherever **necessary**.

Q.1. A. Choose the correct option from the following and rewrite the sentence. 10

- a. _____ is used as a substitute in place of *Bacopa monnieri*.
 i) *Centella asiatica* ii) *Phyllanthus amarus*
 iii) *Terminalia arjuna* iv) *Polyalthia longifolia*
- b. _____ is a compilation of official standards for drugs manufactured in India.
 i) Ayurved ii) AYUSH iii) Indian Pharmacopoeia iv) Monograph
- c. Description of each single drug or preparation included in a Pharmacopoeia is called _____.
 i) Flora ii) Monograph iii) Biograph iv) None of these
- d. *Glycyrrhiza glabra* is commonly known as _____.
 i) licorice ii) nicotine iii) brahmii v) arjuna
- e. _____ is an example of bast fiber.
 i) Cotton ii) Coir iii) Jute iv) Agave
- f. Saffron is obtained from _____.
 i) Style and stigma of *Crocus* ii) Style and stigma of *Cocus*
 iii) Petals of *Chrysanthemum* iv) Flowers of *Syzigium*
- g. Raising trees in farm in an integrated manner is known as _____.
 i) Urban Forestry ii) Agroforestry iii) Silviculture iv) Riparian Buffer
- h. _____ oil is commonly used as carrier oil in aromatherapy.
 i) jojoba ii) lemon iii) jasmine iv) neem
- i. The botanical source of Vanilla is _____.
 i) bean ii) flower iii) leaves iv) root
- j. _____ is used in tenderizing meat.
 i) papaya ii) pineapple iii) kokum iv) kale

Q.1. B. Answer the following in one or two sentences. 10

- a. Define Primary metabolites.
 b. Define forestry.
 c. Define condiments.
 d. Define Aromatherapy.
 e. What are Cellulases?

Q.2. Answer any two from the following:

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- A. Explain Indian Herbal Pharmacopoeia and Ayurvedic Pharmacopoeia.
- B. What are secondary metabolites? Explain sources properties, uses of *Saraca asoca*.
- C. Illustrate with examples different types of materials used for adulterating herbal drugs.
- D. With the help of suitable examples explain the effect of regional and seasonal variation in Secondary metabolites.

Q.3. Answer any two from the following:

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- A. Give the botanical name and biological source of cotton. Add an account on processing of cotton.
- B. Mention the botanical name and biological source of Cardamom. Describe the morphology of Cardamom.
- C. Define organic farming. Give its salient features, advantages and disadvantages.
- D. Enlist various types of forests found in India. Give a detailed account of Moist Tropical Forests.

Q.4. Answer any two from the following :

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- A. Give an account of chemical constituents and uses of Jasmine and Lemon oil.
- B. What are Biofuels? Give an account of types of biofuels.
- C. Give the botanical source, nutritional value and uses of Kale.
- D. What is Bromelain? Give the properties and uses of Bromelain.

Q.5. Write short notes on (Any four) :

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- A. Significance of Pharmacopoeia.
- B. Substitute and Adulterant.
- C. Aims of urban forestry.
- D. Subtropical montane forests.
- E. Jojoba oil
- F. Botanical source & uses of vanillin.