

Date: 10.10.2019

Time – 3 Hours

Total Marks :100

- N. B. 1. All the questions are compulsory.  
2. Figures to the right indicate full marks.  
3. Draw neat labelled diagrams where ever necessary.

Q.1. A] Choose the most correct option and rewrite the sentence. (10)

- a) ----- is useful to improve intelligence.  
i) Ashokarisht ii) Shankh Pushpi  
iii) Gotu Kola iv) Bhui Amla
- b) Among the following, which is the source of tannins?  
i) *Atropa* ii) *Glycyrrhiza*  
iii) *Treminalia* iv) *Eucalyptus*
- c) Babool gum is obtained from -----.  
i) sea-weeds ii) *Sterculia urens*  
iii) *Picea* species iv) *Acacia arabica*
- d) Mangrove plants are found in ----- forests.  
i) Beach ii) Tidal  
iii) Swamp iv) Scrub
- e) Silviculture means -----  
i) growing forests ii) rearing silkworm  
iii) rearing honeybees iv) extracting silver
- f) Botanically saffron is ----- of flowers.  
i) petals ii) filaments  
iii) stigmas iv) sepals
- g) Jute is obtained from ----- of the plant.  
i) leaves ii) bark  
iii) phloem iv) Seed coat
- h) Papains are extracted from -----  
i) *Ananus comosus* ii) *Carica papaya*  
iii) *Garcinia indica* iv) *Amaranthus spinosus*
- i) First generation biofuels are produced from.....  
i) algae ii) fungi  
iii) biomass iv) agricultural crops
- j) Which algae is called 'superfood'?  
i) *Chlorella* ii) *Anabaena*  
iii) *Ulva* iv) *Rivularia*

Q.1. B] Answer the following questions in one or two sentences. (10)

- a) Which plant is used to adulterate arjuna bark?  
b) What is monograph?  
c) Define agroforestry.  
d) Give the sources of vanillin.  
e) Write scientific name of Spirulina

- Q.2. Answer **any two** from the following: (20)
- Give the significance of Indian Pharmacopoeia.
  - Write macroscopic characters and pharmacological activities of *Centella asiatica*.
  - Give the sources, properties and uses of tannins.
  - What is adulteration and substitution of medicinal herbs? What is its need? Explain the types of adulteration and substitution.
- Q.3. Answer **any two** from the following: (20)
- Describe climate, geography and flora of tropical moist forests of India.
  - Define organic farming. Describe aims, objectives and significance of organic farming.
  - Give the source, properties and uses of cotton fibre.
  - What is saffron? Give its active constituents. Add a note on its commercial importance.
- Q.4. Answer **any two** from the following: (20)
- Write a note on nutraceutical value of *Spirulina* and *Chlorella*.
  - Discuss the uses of Jojoba and Jasmine.
  - What are Biofuels? Discuss the method of production of biofuels.
  - Discuss the sources, properties and applications of Vanillin.
- Q.5. Write short notes on **any four** of the following: (20)
- Ayurvedic pharmacopoeia.
  - Properties of volatile oils.
  - Uses of jute fibre
  - Objectives of urban forestry
  - Bioethanol
  - Garcinia cambogia*