## 2021

## **BOTANY — HONOURS**

Paper : CC-9
Full Marks : 50

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

## 1. Answer *any five* questions from the following:

 $2 \times 5$ 

- (a) What is essential oil? Why it is called ethereal oil?
- (b) What is 'Dammar gum'? Mention its uses.
- (c) What do you mean by the term 'beverages'? Give an example.
- (d) Name the alkaloids found in *Cinchona* species. From which plant parts do we obtain these alkaloids?
- (e) Distinguish between New World cotton and Old World cotton.
- (f) What is 'Triticale'?
- (g) Write the scientific names of two indigenous timber yielding plants.
- (h) Define the term acclimatization.

## 2. Answer *any two* questions from the following:

(a) Write notes on primary and secondary introduction of crops.

 $2\frac{1}{2} + 2\frac{1}{2}$ 

(b) Comment on the origin of rice plants.

5

(c) Discuss in brief the products and by-products of sugarcane.

5

- (d) Give a brief account on the retting and extraction of jute. Name two species of cotton cultivated in India.

  3+2
- **3.** Answer *any three* questions from the following:
  - (a) Describe the steps involved in the processing of tea. Mention the names of different tea-types based on processing methods. Write the scientific name of tea plant.

    6+3+1
  - (b) Distinguish between essential oil and fatty oil. Write the process of steam distillation for the extraction of essential oil. Why soyabean oil is considered as a healthy oil? Write the scientific names of coconut and mustard plants.

    2+4+2+2

Please Turn Over

(c) Mention the parts used and uses of the following spice plants:

 $2\frac{1}{2} \times 4$ 

2+1+7

- (i) Cumin
- (ii) Bay Leaves
- (iii) Saffron
- (iv) Jayitri.
- (d) Give the botanical name, family and a brief account of method for propagation of potato.
- (e) Discuss in brief the Vavilovian Centre of origin of cultivated crops with examples of specific crops of each region. Comment on the different reasons for the loss of genetic diversity. 7+3

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