#### Total number of printed pages-7

#### 3 (Sem-3/CBCS) BOT HC 2

## 2022 BOTANY

(Honours)

Paper: BOT-HC-3026

### (Economic Botany)

Full Marks: 60

Time: Three hours

# The figures in the margin indicate full marks for the questions.

- 1. Answer the following questions/Choose the correct one: (any seven) 1×7=7
  - (a) Write the full form of NBPGR.
  - (b) Write the botanical name of wheat.
  - (c) What type of soil is suitable for cotton cultivation?
  - (d) Name a drug yielding plant where drug is obtained from root.

- (e) From which part of the plant Papaver somniferum 'opium' is extracted?
- (f) Choose the correct answer:

  Botanical name of the plant that yields pararubber:
  - (i) Ficus elastica
  - (ii) Heuea brasiliensis
  - (iii) Manihot glaziovii
  - (iv) Ficus religiosa
- (g) Choose the correct answer:
  Cinchona officinalis belongs to the family:
  - (i) Acanthaceae
  - (ii) Verbenaceae
  - (iii) Rubiaceae
  - (iv) Asteraceae
- (h) What is the source of 'Congo Coffee'?
- (i) Linseed oil is obtained from which plant?

- (i) Name the family of Tectona grandis.
- (k) What is the advantage of eating ground nuts?
- (1) Define 'loss of crop genetic diversity'.
- 2. Answer the following very briefly: (any four)  $2\times4=8$ 
  - (a) What is 'Orange Fannings'?
  - (b) What is the nature of chief food reserve in
    - (i) Soybean
    - (ii) Rice
    - (iii) Potato and
    - (iv) Sugarcane?
  - (c) Mention the importance of leguminous plants to the ecosystem.
  - (d) How potato plant is propagated?

- (e) What do you understand by domestication?
- (f) State the uses of Coir.
- (g) What is the greatest advantage of plant introduction?
- (h) What are germplasm banks?
- 3. Answer briefly: (any three) 5×3=15
  - (a) Mention the uses of tobacco.
  - (b) Mention the importance of germplasm diversity.
  - (c) Write briefly about two spices (mention scientific name) that are used in Indian cuisine.
  - (d) Mention the uses of timber obtained from Pine.
  - (e) Write short note on habit-forming drugs.

- (f) Write a brief account on millets.
- (g) Give the scientific name, family and parts used of the following:
  - (i) Cardamom
  - (ii) Cumin
- (h) 'Cannabis' is obtained from which plant? Point out the therapeutic effects of cannabis.
- 4. Answer **any three** of the following: 10×3=30
  - (a) Describe the method of processing of sugarcane. Mention the products and by-products of sugarcane industry.

    4+6=10
  - (b) Write an essay on drug yielding plants studied by you.
  - (c) What is plant introduction? What are the different types of plant introduction? Mention the steps involved in plant introduction.

3+2+5=10

- (d) What are essential oils? Write briefly about various methods of extraction of essential oils. How essential oils differ from fatty oils?

  2+6+2=10
- (e) Define fibres from anatomical point of view. How fibres can be classified on the basis of their origin? 4+6=10
- (f) What is tapping? Describe the processing and uses of rubber.

3+4+3=10

- (g) Write the scientific name, family, part used and economic importance of the following spices 2½×4=10
  - (i) Fennel
  - (ii) Saffron
  - (iii) Clove
  - (iv) Black pepper

(h) Discuss briefly the cultivation practices of tea. Describe various steps of processing of black tea. 4+6=10