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(NEP—2020)

(1st Semester)

BOTANY (MAJOR/MINOR)

(Economic Botany)

Full Marks : 75

Time : 3 hours

The figures in the margin indicate full marks for the questions

(SECTION : A—OBJECTIVE)

(*Marks* : 10)

Tick (✓) the correct answer in the brackets provided :   1×10=10

1. The original home of rice is
   (a) South-West Asia   (   )
   (b) South-East Asia   (   )
   (c) Mediterranean   (   )
   (d) China   (   )

2. Official ban or other commercial activity with a particular plant quarantine treatment is
   (a) domestic quarantine   (   )
   (b) embargo   (   )
   (c) international quarantine   (   )
   (d) incubation   (   )

3. Cereals belong to the family
   (a) Poaceae   (   )
   (b) Fabaceae   (   )
   (c) Malvaceae   (   )
   (d) Brassicaceae   (   )

4. Seminal roots of maize are
   (a) temporary roots   (   )
   (b) permanent roots   (   )
   (c) fixed roots   (   )
   (d) non-fixed roots   (   )

5. Which type of fruit is found in rice?
   (a) Legume   (   )
   (b) Caryopsis (   )
   (c) Berry   (   )
   (d) Drupe   (   )

6. Which of the following is not an *ex situ* germplasm conservation strategy?
   (a) Seed gene bank   (   )
   (b) DNA gene bank   (   )
   (c) National Park   (   )
   (d) Botanical Garden   (   )

7. Which one of the following is an oilseed crop?
   (a) *Arachis hypogaea*   (   )
   (b) *Tectona grandis*   (   )
   (c) *Curcuma longa*   (   )
   (d) *Corchorus capsularis* (   )

8. Which of the following is timber-yielding plant?
   (a) *Camellia sinensis*   (   )
   (b) *Gossypium* spp.   (   )
   (c) *Shorea robusta*   (   )
   (d) *Corchorus olitorius*   (   )

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9. Quinine is obtained from the bark of

(a) *Papaver somniferum* ( )

(b) *Zingiber officinale* ( )

(c) *Elaeagnus latifolia* ( )

(d) *Cinchona* spp. ( )

10. Antibiotics are used to treat infections caused by

(a) virus ( )

(b) bacteria ( )

(c) virus and bacteria ( )

(d) all the microorganisms ( )

(SECTION : B—SHORT ANSWERS)

(*Marks* : 15)

Write short notes on/Answer any *five* questions, taking at least *one* from each Unit : $3 \times 5 = 15$

UNIT—I

1. Importance of plant quarantine

2. Origin of agriculture

UNIT—II

3. Sugarcane by-product

4. Economic importance of soya bean

UNIT—III

5. Write down the botanical name, family and part used of turmeric.

6. Write down the botanical name, family and part used of ginger.

UNIT—IV

7. Medicinal uses of *Aloe* spp.

8. Medicinal properties of *Papaver somniferum*

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(SECTION : C—DESCRIPTIVE)

(Marks : 50)

Answer *five* questions, taking at least *one* from each Unit : 10×5=50

UNIT—I

1. Describe Vavilov's centre of origin and diversity of crop plants. 10
2. Give a brief account on tapping and processing of rubber. 5+5=10

UNIT—II

3. Write the botanical description of maize plant. Mention its uses. 5+5=10
4. Write notes on the following : 5+5=10
   (a) Ancient economic botany
   (b) Germplasm conservation

UNIT—III

5. Describe the economic importance of the following plants mentioning their botanical names and families : 5+5=10
   (a) Coffee
   (b) Mustard
6. Write short notes on the following : 5+5=10
   (a) Two fibre-yielding plants with their botanical names, families and uses
   (b) Two timber-yielding plants with their botanical names, families and uses

UNIT—IV

7. Write short notes on the following : 5+5=10
   (a) Drugs obtained from underground stem
   (b) Drugs obtained from roots
8. Give a detailed account on antibiotics. 10

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