

**2 0 2 5**

( 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.** In Vavilov's work, entitled *The Phytogeographical Basis of Plant Breeding*, he recognized

- (a) 6 primary centres ( )      (b) 7 primary centres ( )  
(c) 8 primary centres ( )      (d) 9 primary centres ( )

**2.** Legal enforcement of the measures aiming prevention of pest from spreading in new areas is

- (a) plant quarantine ( )  
(b) germplasm augmentation ( )  
(c) genetic diversity ( )  
(d) genetic transformation ( )

- 3.** Rubber is mostly exported in the form of  
 (a) latex ( ) (b) tyres ( )  
 (c) crepe rubber ( ) (d) sheet rubber ( )
- 4.** In which plant stem nodes and internodes are found?  
 (a) Sugarcane ( ) (b) Soya bean ( )  
 (c) Winged bean ( ) (d) Pigeon pea ( )
- 5.** Which plant is not included under legumes?  
 (a) Maize ( ) (b) Winged bean ( )  
 (c) Pigeon pea ( ) (d) Soya bean ( )
- 6.** In ginger, the plant part used as a spice is  
 (a) the branched rhizome ( )  
 (b) the swollen root ( )  
 (c) the above ground stem ( )  
 (d) the tender leaf ( )
- 7.** Tea is a beverage plant under the family  
 (a) Rubiaceae ( ) (b) Malvaceae ( )  
 (c) Tiliaceae ( ) (d) Theaceae ( )
- 8.** Which among the following are used as culinary spices?  
 (a) Tea and sal ( ) (b) Ginger and turmeric ( )  
 (c) Jute and turmeric ( ) (d) Tea and coffee ( )
- 9.** Medicinal plant whose bark is used as medicine is  
 (a) *Aloe* spp. ( ) (b) *Cinchona* spp. ( )  
 (c) *Curcuma longa* ( ) (d) *Elaeagnus latifolia* ( )

10. Who discovered the first antibiotic, penicillin?

- (a) Louis Pasteur ( )      (b) Alexander Fleming ( )  
(c) Robert Koch ( )      (d) Edward Jenner ( )

**( SECTION : B—SHORT ANSWERS )**

( Marks : 15 )

Write short notes on *five*, taking at least *one* from each Unit : 3×5=15

UNIT—I

1. Plant quarantine
2. Importance of germplasm augmentation

UNIT—II

3. Morphology of rice
4. Uses of French bean

UNIT—III

5. Botanical name, family and uses of cotton
6. Botanical name, family and uses of jute

UNIT—IV

7. Medicinal uses of *Aloe* spp.
8. Broad spectrum antibiotics

( SECTION : C—DESCRIPTIVE )

( Marks : 50 )

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

UNIT—I

1. What do you understand by Vavilov's centres of origin? Explain its uses and implications. 3+7=10
2. Explain tapping, processing and uses of natural rubber. 10

UNIT—II

3. Describe the morphological characters of maize and its economic importance. 5+5=10
4. Describe the morphological characters and uses of soya bean. 5+5=10

UNIT—III

5. Write short notes on the following mentioning their botanical names, families and parts used of : 5+5=10
  - (a) Teak and sal
  - (b) Tea and coffee
6. Describe the economic importances of the following plants mentioning their botanical names and families : 5+5=10
  - (a) Groundnut and mustard
  - (b) Turmeric and ginger

UNIT—IV

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

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