

D 131062

(Pages : 2)

Name.....

Reg. No.....

THIRD SEMESTER B.VOC. DEGREE EXAMINATION, NOVEMBER 2025

Organic Farming

SDC 3AG 11—PLANT TISSUE CULTURE AND ENTOMOLOGY

(2021 Admissions)

Time : Two Hours and a Half

Maximum : 80 Marks

Section A*Short answer type carries 2 marks each-15 questions.**(Ceiling 25)*

1. Define somatic hybridization.
2. Brief the application of protoplast fusion.
3. Enlist different stages of somatic embryo during somatic embryogenesis.
4. Describe in vitro secondary metabolite production.
5. Define callus culture.
6. What is surface sterilization ? Explain with example.
7. Describe pest as vector of disease with an example.
8. List two important pest of banana with scientific name.
9. List two important pest of brinjal with scientific name.
10. Management of rice swarming caterpillar in rice.
11. Brief note on management on rhinoceros beetle.
12. Brief note on management on coconut mite.
13. Brief note on management on mango stem borer.
14. Brief note on management on cashew stem borer.
15. List down four organic pesticides for vegetables along with their important constituents.

Turn over

Section B

*Short essay type carries 5 marks each - 8 questions.
(Ceiling 35)*

1. Application of somatic hybridisation or protoplast fusion.
2. How to achieve Invitro secondary metabolite production.
3. Differentiate solid and liquid culture medium. What are advantage and disadvantage of both and give examples.
4. Describe in vitro production of haploids and list its advantages/ applications.
5. Describe in detail on the physical, biological, cultural and chemical control measures for Banana rhizome weevil.
6. Write two major pests of Cardamom. Brief their symptoms and management practices.
7. Write down chemical control measures for the following pest.
 - Rhinoceros beetle.
 - Tea mosquito bug.
 - Cardamom thrips.
 - Fruit fly.
8. Write two major pests of Cardamom. Brief their symptoms and management practices.

Section C

Essay type carries 10 marks each (2 out of 4)

1. Write down the classification of class Insecta down to orders and also mention the major pests of rice, coconut, pepper, mango and banana along with their scientific names.
2. Detail the major pests (common and scientific name) of important fruits and vegetables along with their damage, and management (mention Physical, cultural, biological, organic and chemical control measures).
3. Detail the major pests (common and scientific name) of important coconut, Rice and sugarcane along with their damage, and management (mention Physical, cultural, biological, organic and chemical control measures).
4. Detail the procedure of micropropagation in banana along with various steps and its advantages over conventional method of propagation.

(2 × 10 = 20 marks)