



BRAINWARE UNIVERSITY

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Term End Examination 2024-2025

Programme – B.Sc.(Ag)-Hons-2022

Course Name – Diseases of Field and Horticultural Crops and Their Management -I

Course Code - CC-BAG574(T)

(Semester V)

Full Marks : 50

Time : 2:0 Hours

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group-A

(Multiple Choice Type Question)

1 x 20=20

1. Choose the correct alternative from the following :

- (i) Which disease is characterized by water-soaked lesions on rice leaves with a yellow halo around them?
 - a) Brown Spot
 - b) Sheath Blight
 - c) Bacterial Blight
 - d) Khaira Disease
- (ii) Which disease in rice leads to the formation of smut balls containing fungal spores affecting the ovary within the panicles?
 - a) Blast
 - b) False smut
 - c) Tungro
 - d) Bacterial Blight
- (iii) Which pathogen primarily causes the Late Leaf Spot in groundnut?
 - a) Xanthomonas campestris
 - b) Cercospora arachidicola
 - c) Rhizoctonia solani
 - d) Fusarium oxysporum
- (iv) Which disease in pigeonpea is characterized by wilting, yellowing, and sudden plant death?
 - a) Phytophthora Blight
 - b) Wilt
 - c) Sterility Mosaic
 - d) Rhizoctonia Blight
- (v) Which of the following diseases of groundnut primarily affects the leaves, causing small, circular lesions with a yellow halo?
 - a) Early leaf spot
 - b) Late leaf spot
 - c) Root rot
 - d) Stem canker
- (vi) What is the primary causal agent of black root rot in tobacco plants?
 - a) Phytophthora spp.
 - b) Xanthomonas campestris
 - c) Rhizoctonia solani
 - d) Alternaria alternata

- (vii) Infer the vector of sterility mosaic in pigeon pea.
- | | |
|------------------------|-------------------|
| a) Bemisia tabaci | b) Aphis gossypii |
| c) Rhodopholus similis | d) Aceria cajani |
- (viii) Which pathogen causes anthracnose in green gram (mung bean)?
- | | |
|-----------------------|-----------------------------|
| a) Fusarium oxysporum | b) Colletotrichum truncatum |
| c) Xanthomonas oryzae | d) Phytophthora infestans |
- (ix) Interpret Which pathogen is responsible for Coffee rust?
- | | |
|---------------------------|--------------------------|
| a) Hemileia vastatrix | b) Alternaria coffeicola |
| c) Xanthomonas campestris | d) Pseudomonas syringae |
- (x) Infer which pathogen is responsible for tomato leaf spot disease?
- | | |
|------------------------|---------------------------|
| a) Tomato mosaic virus | b) Xanthomonas campestris |
| c) Alternaria solani | d) Pseudomonas syringae |
- (xi) Interpret which pathogen causes leaf spot in cruciferous vegetables?
- | | |
|---------------------------|----------------------------|
| a) Xanthomonas campestris | b) Alternaria brassicicola |
| c) Pseudomonas syringae | d) Erwinia carotovora |
- (xii) Interpret which pathogen is responsible for Papaya mosaic disease?
- | | |
|---------------------------|-----------------------------------|
| a) Xanthomonas campestris | b) Papaya ringspot virus |
| c) Fusarium oxysporum | d) Colletotrichum gloeosporioides |
- (xiii) Choose the correct option: Smuts and grain mold are diseases that commonly affect which crop?
- | | |
|------------|----------|
| a) Rice | b) Maize |
| c) Sorghum | d) Bajra |
- (xiv) Name the rice disease which attacks during flowering stage.
- | | |
|---------------|--------------------------|
| a) Brown spot | b) Bacterial leaf blight |
| c) False smut | d) Tungro |
- (xv) Identify the genetic material present in rice tungro bacilliform virus.
- | | |
|----------|----------|
| a) ssRNA | b) ssDNA |
| c) dsRNA | d) dsDNA |
- (xvi) Name the vector of rice tungro virus disease.
- | | |
|---------|---------|
| a) BPH | b) GLH |
| c) WBPH | d) ZZLH |
- (xvii) Find out the disease of maize which is related to crazy top symptom.
- | | |
|------------------------|---------------------|
| a) Downy mildew | b) Fungal stalk rot |
| c) Bacterial stalk rot | d) Leaf blight |
- (xviii) Name the causal organism of post flowering stalk rot in maize.
- | | |
|-----------------------------|------------------------------|
| a) Peronosclerospora sorghi | b) Cephalosporium maydis |
| c) Erwinia chrysanthemi | d) Helminthosporium carbonum |
- (xix) Identify the pathogen which produces ergot toxin.
- | | |
|---------------------------|----------------------------|
| a) Claviceps microcephala | b) Sclerospora graminicola |
| c) Aspergillus flavus | d) All of these |
- (xx) What is the primary source of infection of ergot of bajra?
- | | |
|------------------|------------------|
| a) Chlamydospore | b) Oospore |
| c) Sclerotia | d) None of these |

Group-B

(Short Answer Type Questions)

2.5 x
10=25

2. What are the common symptoms of early leaf spot in groundnut? (2.5)
3. How does the pathogen of Bacterial spot affect soybean leaves and develop spots? Name the causal organism. (2.5)
4. Explain the concept of mosaic disease in tobacco, and its impact on leaf production. (2.5)
5. Outline the etiology and diagnostic symptoms of anthracnose of both black gram and green gram plants? (2.5)
6. Discuss the management tactics of wilt disease of guava. (2.5)
7. Simplify how can farmers prevent damping off in tomato seedlings? (2.5)
8. Develop suitable management strategies against yellow mosaic of greengram. (2.5)
9. What are diagnostic symptoms and etiology of Brown spot disease in rice? (2.5)
10. What are significance of Ergot disease in bajra and its management strategies. (2.5)
11. Explain how does foot rot pathogen infect papaya plants. (2.5)

OR

Conclude the cultural practices to manage Bunchy top virus in banana. (2.5)

Group-C

(Long Answer Type Questions)

5 x 1=5

12. Explain the symptoms of blister blight in tea plants and recommend control measures. (5)

OR

Explain the management practices to prevent early and late leaf spots in groundnut. (5)
