



BRAINWARE UNIVERSITY

Term End Examination 2023-2024 Programme – B.Sc.(Ag)-Hons-2021 Course Name – Diseases of Field and Horticultural Crops and their Management-II Course Code - CC-BAG673 (T) (Semester VI)

Full Marks: 50

[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) What are the typical symptoms of wheat rust diseases?
 - a) Yellowing and weakening of leaves
- b) Black powdery spores on leaves
- c) White powdery patches on leaves
- d) Dark brown pustules on stems and leaves
- (ii) What is a symptom of sugarcane smut?
 - a) Reddish lesions on stems
 - c) Black fungal spores on inflorescence
- b) Powdery white growth on leaves
- d) Wilted and yellowing leaves
- (iii) Identify the pathogen responsible for causing bacterial wilt disease in sugarcane.
 - a) Fusarium spp.
 - c) Leifsonia xyli subsp. xyli

- b) Xanthomonas albilineans
- d) Pyricularia spp.
- (iv) State the characteristic symptom of white rust in mustard plants.
 - a) White spots on both leaf surfaces
 - c) Large black lesions on stems and leaves
- b) Yellowing and wilting of leaves
- d) Downy growth on leaf undersides
- (v) Identify the name of the pathogen responsible for causing wilt disease in lentils.
 - a) Fusarium oxysporum
- c) Pseudomonas syringae

- b) Xanthomonas campestrisd) Alternaria alternata
- (vi) Cite the name of the pathogen that causes anthracnose in mangoes.
 - a) Colletotrichum gloeosporioides
- b) Xanthomonas campestris

c) Fusarium mangiferae

- d) Pseudomonas syringae pv. syringae
- (vii) Employ a suitable method to control malformation in mango trees.
 - a) Soil drenching with herbicides
- b) Pruning during dormancy and use of miticides and systemic fungicides
- c) Adding excessive nitrogen fertilizer
- d) Decreasing drainage around the tree base
- (viii) Infer the correct option: Gummosis in citrus trees is commonly caused by:
 - a) Botrytis cinerea

- b) Xylella fastidiosa
- c) Alternaria alternata
- d) Phytophthora citrophthora

controlling citrus canker and gummosis.	cultural management practice for
 a) Overhead irrigation c) Excessive fertilizer application (x) Employ the recommended management strat 	
 a) Regular applications of bactericides c) Introducing predatory insects (xi) Employ a recommended approach to control 	 b) Removal of infected plant parts and debris d) Soil solarization fire blight in apple trees.
a) Use of growth regulatorsc) Pruning infected branches during dormant	b) Mulching around the base of trees d) Application of barbicides
state	Application of herbicides
(xii) Cite the primary means of dispersal for downy a) Airborne spores c) Water splash (xiii) Cito the primary means of dispersal for downy	b) Soil contamination d) Insect vectors
 (xiii) Cite the primary means of dispersal for the pa a) Airborne spores c) Soil contamination (xiv) Choose the correct option: Which environmer development and spread of Peach Leaf Curl? 	b) Ingestion by insectsd) Direct contact with infected plants
 a) Dry and hot weather c) Extreme humidity (xv) Employ suitable management method is most disease. 	b) Cool and wet weather d) Acidic soil conditions effective for controlling Peach Leaf Curl
 a) Pruning infected branches during the dormant season c) Improving air circulation around the trees (xvi) Cite the primary causal agent of downy mildex 	b) Applying fungicides during the dormant seasond) Using biological control agentsv in cucurbits.
 a) Botrytis cinerea c) Pseudoperonospora cubensis (xvii) Choose the correct option: How does Stemphy and garlic? 	b) Phytophthora infestans d) Alternaria alternata /lium blight primarily spread in onion
a) Soil contamination c) Airborne conidia (xviii) Choose how does the powdery mildew pathog	b) Seed transmission d) Insect vectors gen primarily spreads among Rose plants.
a) Through root systems	b) Contact between infected and healthy leaves
c) Insect bites (xix) Choose the primary etiological agent responsi	d) Soil contamination
a) Fusarium oxysporumc) Colletotrichum capsici(xx) Report the correct answer: What is the primar	b) Xanthomonas campestris d) Pseudomonas syringae y pathogen causing leaf curl in chillies?
a) Tomato yellow leaf curl virus (TYLCV)c) Tomato big bud virus	b) Cucumber mosaic virus (CMV) d) Tobacco mosaic virus
Grou	р-В
(Short Answer Ty	pe Questions) 2.5 x 10=25
 Infer management of malformation in mango eff What are the symptoms of Brown rust in wheat? What pathogens are responsible for causing wilt of wilt in Cotton plants. 	(2.5)

5. Interpret what causes alternaria blight in wheat?	(2.5)
6. Discuss how does red rot affect sugarcane and how is it dispersed?	(2.5)
7. Explain how does the means of dispersal of pathogens causing Gram diseases aid in their	(2.5)
diagnosis?	(2.5)
8. Write few effective management methods for controlling downy mildew in pea crops? How	v (2.5)
can farmers combat powdery mildew in pea plants?	
9. Anticipate some cultural and biocontrol practices that can aid in disease management for	(2.5)
Rust of pea or dieback of rose.	
10. Develop some effective management methods for controlling different Gram diseases.	(2.5)
11. Infer how can gummosis in citrus trees be effectively controlled.	(2.5)
OR	
Prepare suitable management method can effectively control black scurf disease in potatoes.	(2.5)
Group-C	
(Long Answer Type Questions)	5 x 1=5
12. Write down notes on management practices adopted for Grassy shoot of Sugarcane and	(5)
Sclerotinia stem rot of Mustard.	(-,
OR	
Develop the etiology and suitable management strategies for Powdery mildew of	(5)
Grapevine.	
