MAHARASHTRA AGRICULTURAL UNIVERSITIES EXAMINATION BOARD, PUNE SEMESTER END THEORY EXAMINATION

B.Sc.(Hons.) Agriculture

2022-23 Academic Year : : Second Term : VI (New) : Diseases of Field and Horticultural Crops Semester Title : PATH 365 Course No. and their Management-II : 3 (2+1) Credits Total Marks 14:00 to 17:00 hrs. Time : Thursday, 13.07.2023 Day & Date

Note: 1. Solve ANY EIGHT questions from SECTION 'A'.

- 2. All questions from SECTION 'B' are compulsory
- 3. All questions carry equal marks.
- Draw neat diagram wherever necessary.

SECTION 'A'

- Q.1 Draw neat labeled diagram of disease cycle and causal organism of following diseases (Any Two):
 - a) Loose smut of wheat
- b) Powdery mildew of grape
- c) Leaf rust of wheat
- Q.2 Describe symptoms and suggest suitable management practices for following diseases:
 - a) Downy mildew of sunflower b) Downy mildew of grapevine
- Q.3 Describe symptoms and suggest suitable management practices for following diseases (Any Two):
 - a) White rust of mustard
- b) Red rust of mango
- c) Black stem rust of wheat
- Q.4 Describe symptoms and give management practices for following diseases (Any Two):
 - a) Linseed rust

- b) Gram wilt
- c) Turmeric leaf spot
- Q.5 Enlist any four diseases of cotton with causal organisms and describe symptoms, epidemiology. Suggest suitable management practices for Black arm of cotton.
- Q.6 Write short notes on (Any Two):
 - a) Black leaf spot of rose
- b) Fruit rot of chilli
- c) Bulb and neck rot of garlic
- Q.7 a) Enlist diseases of sugarcane. Describe symptoms and suggest suitable management practices for Whip smut of sugarcane.
 - b) Enlist diseases of onion. Describe symptoms and suggest suitable management practices for Purple blotch.
- Q.8 a) Enlist diseases of cucurbits. Describe symptoms and suggest suitable management practices for Downy mildew.
 - b) State any four diseases of potato with causal organisms. Describe symptoms and suggest suitable management practices for Late blight of potato.

(P.T.O.)

- a) Enlist any four diseases of citrus with causal organisms. Describe symptoms and 0.9 management practices for Citrus canker.
 - b) State any four diseases of apple with causal organisms. Describe symptoms and management practices for Fire blight of apple.
- Q.10 Write down causal organism and mode of transmission of following diseases:
 - a) Cucumber mosaic b) Grape fan leaf
- c) Citrus exocortis
- d) Apple mosaic

SECTION 'B'

- Q.11 Answer the following in one sentence:
 - 1) Which mango disease is caused by Algae pathogen?
 - 2) On which side of leaf, aeciospores of Wheat rust fungi are borne?
 - 3) How many spores are produced by Macro cyclic rust?
 - 4) Write down causal organism of Leaf spot of strawberry.
 - 5) Give required time and temperature for hot water treatment for Loose smut of wheat.
 - 6) Which is the vector for Fan leaf disease of grapevine?
 - 7) Which is a vector for Citrus greening disease?
 - 8) Name the parasitic weed in mango crop.
- O.12 State True or False:
 - 1) Powdery mildew of pea is Erysiphe pisi.
 - 2) Peach leaf curl is caused by virus.
 - 3) Rust of lentil is caused by *Uromyces viciae-fabae*.
 - 4) Barberry is alternate host of Black stem rust of wheat in India.
 - 5) Coriander stem galls are caused by *Protomyces macrospores*.
 - 6) Leaf curl of chilli is transmitted by thrips vector.
 - 7) Citrus Tristeza disease is caused by *Toxoptera citricida*.
 - 8) White rust is systemic disease in cucurbit crops.

