

MAHARASHTRA AGRICULTURAL UNIVERSITIES EXAMINATION BOARD, PUNE  
SEMESTER END THEORY EXAMINATION

B.Sc.(Hons.) Horticulture

[Fifth Deans' Committee Recommended Syllabus]

|                                    |   |                         |
|------------------------------------|---|-------------------------|
| Semester : VI                      | Term : Second   | Academic Year : 2024-25 |
| Course No. : H/PATH 363            | Title : Diseases of Vegetables, Ornamentals and Spice Crops |                         |
| Credits : 3(2+1)                   |   |                         |
| Day & Date : Wednesday, 23.04.2025 | Time : 14:00 to 17:00 hrs.                                  | Total Marks : 80        |

- Note : 1. Solve ANY EIGHT questions from SECTION 'A'.  
2. All questions from SECTION 'B' are compulsory.  
3. All questions carry equal marks.  
4. Draw neat diagram wherever necessary.

SECTION 'A'

- Q.1 Enlist the important diseases of okra (*bhendi*) along with their causal organisms. Describe powdery mildew disease of okra with respect to following points:  
a) Symptoms      b) Etiology      c) Integrated Disease Management
- Q.2 Write etiology and perpetuation of following diseases of tomato:  
a) Early blight      b) Fusarium wilt
- Q.3 Enlist the important diseases of potato along with their causal organisms. Explain late blight disease of potato with respect to following points:  
a) Symptoms      b) Perpetuation and spread      c) Integrated Disease Management
- Q.4 a) Explain the factors responsible for post-harvest diseases of vegetables and suggest the management practices.  
b) Write the symptoms of powdery mildew disease of rose and explain the etiology of pathogen.
- Q.5 Enlist the important diseases of pepper along with their causal organisms. Write in detail *Phytophthora* foot rot of pepper with respect to symptoms, etiology and control measures.
- Q.6 Write the symptoms of the following diseases (Any Four):  
a) Rust of jasmine  
b) Powdery mildew of gerbera  
c) Onion smudge  
d) White rust of raddish  
e) Chilli leaf curl
- Q.7 a) Describe the symptoms and control measures of anthracnose of beans.  
b) Describe the symptoms and control measures of dieback of cinnamon.
- Q.8 Enlist the important diseases of cabbage along with their causal organisms. Explain club root of cabbage with respect to symptoms, perpetuation and control measures.

(P.T.O.)

- Q.9 a) Describe the symptoms and Integrated Disease Management of little leaf of brinjal.  
b) Describe the symptoms and Integrated Disease Management of *Taphrina* leaf spot of turmeric.

Q.10 Suggest Integrated Disease Management practices for the following diseases (Any Four):

- a) Pea necrosis virus
- b) Bacterial blight of beans
- c) Powdery mildew of marigold
- d) Nutmeg wilt
- e) Beet yellows

SECTION 'B'

Q.11 State True or False:

- 1) Oomycetes fungus produces uniflagellate motile zoospore in sporangium.
- 2) Generally, coloured varieties of onion are resistant to smudge disease.
- 3) Cleistothecium is completely closed type of ascocarp.
- 4) Bordeaux mixture (0.5 to 0.6 %) is the best selective fungicide for the management of powdery mildew disease.
- 5) Yellow vein mosaic of okra is transmitted by aphids.
- 6) Powdery mildew of coriander is caused by *Erysiphe polygoni*.
- 7) Jasmine rust is incited by *Uromyces hobsoni*.
- 8) Sulphur is generally not recommended for the management of downy mildew in cucurbits.

Q.12 Fill in the blanks:

- 1) Downy mildew in onion is caused by \_\_\_\_\_.
- 2) The fungus, *Alternaria solani* produces a toxin, called \_\_\_\_\_.
- 3) *Phomopsis vexans* causes \_\_\_\_\_ disease in brinjal.
- 4) Rugose mosaic of potato is caused by \_\_\_\_\_ organism.
- 5) \_\_\_\_\_ is a form of conidia, where both longitudinal as well as transverse septa are observed.
- 6) \_\_\_\_\_ disease of chilli is also known as ripe fruit rot disease.
- 7) Powdery mildew in gerbera is caused by \_\_\_\_\_.
- 8) \_\_\_\_\_ is an important and commonly used fungal bioagent for disease management.

