



MJ-526

M.Sc. (Botany)

4th Semester Examination, Jan.-June, 2022

Paper - IV

Elective - II

Molecular Plants Pathology - II

Time : Three Hours] [*Maximum Marks* : 80

Note : Answer **all** questions. All questions carry equal marks.

Unit-I

1. What is disease forecasting? Describe the factors responsible for the establishment of a disease.

OR

Write notes on any **two** of the following :

- (a) Biological plant disease control

(2)

- (b) Chemical plant disease control
- (c) Breeding for plant disease resistance varieties
- (d) Plant quarantine

Unit-II

2. Describe the structural and physiological defense mechanism of host against pathogen.

OR

Write notes on any **two** of the following :

- (a) Defense through hyper-sensitive reactions
- (b) Vertical and horizontal resistance
- (c) Phytoalexins
- (d) Biochemical defense mechanism in plants

Unit-III

3. Describe the symptoms of Rust disease and explain the life cycle of pathogen.

OR

Write notes on any **two** of the following :

- (a) Wart disease of potato
- (b) Citrus canker
- (c) Tundu disease
- (d) Wilt disease of Arhar (*Cajanus indicus*)

(3)

Unit-IV

4. Describe plant disease due to mycoplasma.

OR

Write notes on any **two** of the following :

- (a) Sandal spike disease
 - (b) Yellow vein mosaic of bhindi
 - (c) Mosaic of tobacco
 - (d) Ear-cockle of wheat
-