

## 2023

# AGS 2nd Semester Examination B.Sc. Hons. in Agriculture

Fundamentals of Plant Pathology

PAPER - 206

Full Marks: 50

Time: 2 hours

The figures in the right-hand margin indicate marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

Answer from all the Groups as directed.

#### GROUP-A

- 1. Answer any five questions from the following:  $2\times5=10$ 
  - (a) Define pathogenesis
  - Who is considered the 'Father of Phytobacteriology'? Write about his contribution to phytopathology.

(Turn Over)

Name any two diseases caused by bacteria in crop plants.

What do you mean by localized disease?

Name any two diseases caused by fungi in crop plants.

(f) What is meant by "non-parasites or abiotic diseases"?

Distinguish between wilt and blight.

What is disease triangle?

#### GROUP-B

2. Answer any four questions from the following:  $5\times4=20$ 

Define disease. Classify the plant diseases. 2+3=5

- (b) What are the different chemical fungicides used to control plant diseases? 5
- (c) Write the phenomenon of pre-penetration and post-penetration.

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- What is the role of growth regulators and enzymes in plant pathogenesis? 5
- (e) Explain the scope and importance of plant pathology in agriculture.
- What are the principles of plant disease management?

### GROUP-C

- 3. Answer any two questions from the following:  $10\times2=20$ 
  - (a) What are toxins? Discuss the role of toxins in disease development. 2+8=10
  - Write the role of biotechnology and remote sensing in plant disease management. 10
    - (c) What is fungi? Write about the classification of fungi. 2+8=10
    - (d) Write the defense mechanisms of plants, both structural and biochemical, against pathogens.

