

2019

BOTANY

(Major)

Paper : 5.2

(**Plant Pathology and Lichen**)

Full Marks : 60

Time : 3 hours

*The figures in the margin indicate full marks
for the questions*

1. Answer the following as directed : 1×7=7

- (a) What is called an appressorium?
- (b) Name an algal disease of tea plant.
- (c) Modification of floral parts into leafy structures by pathogenesis is called _____.

(Fill in the blank)

- (d) What is damping off?
- (e) Which plant disease was responsible for Great Bengal Famine in 1943?

(f) What are soledia?

(g) What is meant by heterocious pathogen?

2. Write brief notes on the following : $2 \times 4 = 8$

(a) Obligate parasite and facultative parasite

(b) Tyloses

(c) Disease susceptibility

(d) Hypertrophy and hyperplasia

3. Write briefly on any *three* of the following :

$5 \times 3 = 15$

(a) Integrated disease management (IDM)

(b) Vertical resistance and horizontal resistance

(c) Biological control of plant diseases

(d) Simple interest disease and compound interest disease

(e) Necrotic symptoms of plant disease

4. Discuss the role of enzymes and toxins in disease development. 10

Or

Write notes on the following : 5×2=10

(a) Citrus canker

(b) Tobacco mosaic virus (TMV)

5. Give an account of the symptoms, causal organism, disease cycle and control measures of late blight of potato. 2+2+3+3=10

Or

Discuss the various defence mechanisms found in plants. 10

6. Discuss the symptoms, etiology, disease cycle and control measures of white rust of crucifers. 10

Or

Give an account of ecological and economic importance of lichen. 10
