

3 (Sem-5) BOT M 2

2 0 1 5

BOTANY

(Major)

Paper : 5.2

(Plant Pathology and Lichen)

(Theory)

Full Marks : 60

Time : 3 hours

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

1. Answer the following questions : 1×7=7
- (a) Who established the 'germ theory' of disease?
 - (b) Name the first fungicide which was used in the control of fungal disease of plant.
 - (c) What is the causal organism of 'white rust of crucifer'?
 - (d) In one fungal disease of wheat crop, the phenomenon of heteroecism is observed. What is the name of the disease?

- (e) *Xanthomonas citri* is responsible for causing a serious disease of lemon tree. Name the disease.
- (f) Phycobiont is an important component of lichen. What is the other component?
- (g) Write the name of a reindeer moss.

2. Answer the following questions : 2×4=8

- (a) What is the causal organism of leaf spot disease of cabbage? Draw the structure of the reproductive body of the causal organism.
- (b) Distinguish facultative parasite from obligate parasite. Give one example from each of them.
- (c) Draw a schematic labelled diagram of different stages in the development of a plant disease cycle.
- (d) What is meant by 'blight'? Give one example of a disease which is showing blight symptom in one important crop plant.

(3)

3. Write brief notes on/Answer any *three* of the following : 5×3=15
- (a) Chemical weapons of plant pathogens for establishing pathogenesis
 - (b) What are the elements of a plant disease epidemic?
 - (c) Preexisting defense structures of plants
 - (d) Biological control of plant disease
4. Write an account on the dissemination and transmission of fungal diseases of plants. 10
5. Write notes on the following : 5×2=10
- (a) Yellow mosaic of bhindi
 - (b) Leaf rust or orange rust of wheat
6. Write a note on the types of plant resistance to pathogens. 10

Or

Write an account on the classification of lichen. 10

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