

4/EH-62 (iv) (Syllabus-2015)

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(May/June)

BOTANY

(Elective/Honours)

(Microbiology, Mycology and Plant Pathology)

(BOTELH-401)

Marks : 56

Time : 3 hours

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

Answer **five** questions in total including Question No. 1, which is compulsory. Answer the remaining **four** questions taking **one** from each Section.

1. Write short notes on the following : $4 \times 4 = 16$

- (a) Archaeobacteria
- (b) Nitrifying bacteria
- (c) Development of Ascus
- (d) Citrus canker

SECTION—I

2. Describe binary fission and endospore formation in bacteria. $5+5=10$

(2)

3. Describe structure of TMV and bacteriophage T₄ with suitable diagrams. 5+5=10

SECTION—II

4. Describe various phases of a typical bacterial growth curve. 10
5. Differentiate between food spoilage and food poisoning. 10

SECTION—III

6. Give Ainsworth's classification of fungi mentioning identifying characters with examples. 10
7. Write notes on the following : 5+5=10
- (a) Growth forms of Lichens
- (b) Economic importance of fungi

SECTION—IV

8. Write disease symptoms, disease cycle and control measures of late blight of potato. 3+5+2=10
9. Give an account of biochemical defense mechanism in plants against infection. 10

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