

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

2 0 1 7

(April)

BOTANY

(Elective)

(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. Question No. 1
is compulsory. Select the remaining **four** questions
one from each Section

1. Write short notes on the following : $4 \times 4 = 16$
- (a) Archaeobacteria
 - (b) Pasteurization
 - (c) Economic importance of lichens
 - (d) Koch's postulates

SECTION—I

2. With the help of suitable diagram, describe
the ultrastructure of a bacterial cell. 10

3. Explain with diagrams the lytic cycle of viruses. 10

SECTION—II

4. Describe various phases of a typical microbial growth curve. 10
5. Give a brief account on the role of microbes in decomposition of organic matter. 10

SECTION—III

6. What is heteroecious fungus? Describe the life cycle of *Puccinia*. 1+9=10
7. Write brief accounts on the following : 5×2=10
- (a) Development of ascus
 - (b) Economic importance of fungi

SECTION—IV

8. Describe in brief disease symptoms, disease cycle and control measures of late blight of potato. 3+5+2=10
9. Write notes on the following : 5×2=10
- (a) Dissemination of plant diseases
 - (b) Classification of plant diseases based on causal organisms
