

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

2 0 1 8

(April)

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 and select the
remaining **four** questions, **one** from each Section

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

- (a) Mycoplasmas
- (b) Food spoilage and food poisoning
- (c) Ascus development
- (d) Disease cycle of early blight of potato

(2)

SECTION—I

2. Describe the binary fission and endospore formation in bacteria. 5+5=10
3. Describe the structure of TMV and bacteriophage T₄ with suitable diagram. 5+5=10

SECTION—II

4. Classify microbes on the basis of nutrition giving example in each case. 10
5. What are antibiotics? Explain their mode of action. 2+8=10

SECTION—III

6. Give a brief outline of Ainsworth's classification of fungi mentioning identifying characters with examples. 10
7. Write notes on the following : 5+5=10
 - (a) Vegetative structure in fungi
 - (b) Growth forms of lichens

8D/1785

(3)

SECTION—IV

8. Give an account of biochemical defense mechanisms in plants against infection. 10
9. Write explanatory notes on the following : 5×2=10
 - (a) Transmission of diseases
 - (b) Citrus canker

8D—2400/1785

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