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(July)

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 *any* **five** questions. Question No. **1** is compulsory. Answer remaining **four** questions, selecting **one** from each Section

1. Write short notes on the following : 4×4=16

- (a) Mycoplasmas
- (b) Microbial growth curve
- (c) Basidiocarp of *Agaricus*
- (d) Citrus canker

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 diagrams. 5+5=10

SECTION—II

4. What is food spoilage? Name a few microorganisms which are involved in spoilage of foods. Elucidate the preventive measures in food spoilage. 2+4+4=10
5. What are antibiotics? Explain the different types and their mode of actions. 2+8=10

SECTION—III

6. Give a brief outline of Ainsworth's classification of fungi mentioning identifying characters with examples. 10
7. With the help of suitable diagrams, describe the range of reproductive structures in fungi. 10

SECTION—IV

8. Discuss the histological and biochemical defence mechanisms adapted by plants against infections. 5+5=10
9. Name the causal organism, disease symptoms, disease cycle and control measures of late blight of potato. 1+2+5+2=10

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