

**D 71619**

(Pages : 2)

Name.....

Reg. No.....

**THIRD SEMESTER B.A./B.Sc. DEGREE EXAMINATION, NOVEMBER 2019**

(CUCBCSS—UG)

**Botany**

**BOT 3B 03—MICROBIOLOGY, MYCOLOGY, PHYCOLOGY, LICHENOLOGY AND  
PLANT PATHOLOGY**

Time : Three Hours

Maximum : 80 Marks

**Part A**

I. Answer *all* questions (1 mark each) :

- 1 Bacteria with comma shape is called \_\_\_\_\_.
- 2 The primary host of *Puccinia graminis* is \_\_\_\_\_.
- 3 Leafy lichens are called \_\_\_\_\_.
- 4 Wart like structures formed from the lichen thallus is known as \_\_\_\_\_.
- 5 Bunchy top of banana is caused by \_\_\_\_\_.
- 6 Why Deuteromycetes are termed “fungi imperfecti”?
- 7 What is plant quarantine ?
- 8 What is SCP ?
- 9 What is a plasmid ?
- 10 What is a dikaryon ?

(10 × 1 = 10 marks)

**Part B**

II. Answer *all* questions - Short answer (2 marks each) :

- 11 Explain heterothallism with example.
- 12 What are the general symptoms of plant diseases ?
- 13 Explain the ecological importance of lichens.
- 14 Differentiate between uredospore and teleutospore.
- 15 What is TMV ? How it is transmitted ?
- 16 What are viroids ?
- 17 Comment on the role of microbes in alcohol and acid production.

**Turn over**

- 18 Illustrate the fruiting body of *Peziza*.
- 19 What is mutualism ?
- 20 What are fungal toxins ?

(10 × 2 = 20 marks)

### Part C

III. Answer any *six* questions - Short essay (5 marks each) :

- 21 Give a brief account on reproduction in lichen.
- 22 Discuss the symptoms and control measures of Bunchy top of Banana.
- 23 Explain the gill structure in *Agaricus* with suitable illustrations.
- 24 Enumerate the industrial applications of bacteria.
- 25 Discuss different kinds of spores in major groups of fungi.
- 26 Explain the nutritional classification of bacteria.
- 27 Write on the chemical and biological methods to control plant disease.
- 28 Comment on various growth forms of lichens.

(6 × 5 = 30 marks)

### Part D

IV. Answer any *two* questions. Essay (10 marks each) :

- 29 Explain the ultrastructure and genetic recombination in bacteria.
- 30 Write an account on economic importance of fungi in agriculture, food, medicine and industry.
- 31 Discuss the disease cycle and control measures of Quick Wilt of Pepper and Root wilt of Coconut ?

(2 × 10 = 20 marks)