

THIRD SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2015

(CUCBCSS-UG)

Core Course—Botany

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

Time : Three Hours

Maximum : 80 Marks

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

Answer in a single word :

- 1 Name a poisonous mushroom.
- 2 Name an asexual spore in Puccinia.
- 3 Cell wall of fungi is made up of :
- 4 Algal partner in lichen is called
- 5 Name the fruiting body of Ascomycotina.

Fill in the blanks :

- 6 Type of nutrition in fungi is _____
- 7 Infectious RNA with no protein coat is called _____
- 8 Isidia formation in lichen is a _____ type of reproduction.
- 9 Leafy lichen is known as _____
- 10 _____ is the causative organism of root wilt of coconut.

(10 x 1 = 10 marks)

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

- 11 **What** are prions ?
- 12 What is phyllosphere ?
- 13 Write notes on disease damping off.
- 14 Explain symbiosis with example.
- 15 What is necrosis ?
- 16 Name the causative organism of Citrus canker and quick wilt of pepper.
- 17 What are the symptoms of disease blast of paddy ?
- 18 Which are the main classes of lichen based on fungal partner ?
- 19 Write notes on fruticose
- 20 What are retrovirus ?

(10 x 2 = 20 marks)

Turn over

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

- 21 Describe the general characteristics of **Deuteromycotina**.
- 22 What are the symptoms and control measures of Mosaic disease of Tapioca ?
- 23 What are the mechanisms of disease resistance in plants.
- 24 Write notes on economic importance of lichen.
- 25 Describe the various type of asexual reproduction in lichen.
- 26 Give an outline of classification of fungi by Ainsworth and Bisby.
- 27 What are the industrial applications of microbiology ?
- 28 Describe the structure and multiplication of viruses.

(6x 5 = 30 marks)

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

- 29 Give an account of growth, nutrition and reproduction of bacteria.
- 30 Explain the life-cycle of **Puccinia**.
- 31 Write an essay on economic importance of fungi.

(2 x 10 = 20 marks)