

(6 pages)

Reg. No. : .....

Code No. : 20856 E      Sub. Code : EMBO 21

B.Sc. (CBCS) DEGREE EXAMINATION,  
APRIL 2024.

Second Semester

Botany — Core

PLANT DIVERSITY – II FUNGI, BACTERIA,  
VIRUSES, PLANT PATHOLOGY, AND LICHENS

(For those who joined in July 2023 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer.

1. Plant body of fungus is known as  
(a) Mycelium                      (b) Stem  
(c) Hyphae                        (d) Both (a) and (c)
2. Imperfect Fungi is  
(a) Deuteromycetes              (b) Ascomycetes  
(c) Basidiomycetes               (d) Zycomycetes

3. Aflatoxin is produced by  
(a) *Aspergillus*                      (b) *Albugo*  
(c) *Peziza*                              (d) *Puccinia*
4. What is the main function of vesicular-arbuscular mycorrhizal (VAM) fungi in plants?  
(a) Absorbing water and minerals  
(b) Facilitating nitrogen fixation  
(c) Providing structural support  
(d) Enhancing nutrient uptake
5. Who was observed bacteria for the first time?  
(a) Antony von Leeuwenhoek  
(b) Koch  
(c) Jenner  
(d) Pasteur
6. Which of the following is a characteristic feature of the lytic cycle in virus reproduction?  
(a) Integration of viral DNA into the host genome  
(b) Release of mature virions without lysing the host cell  
(c) Continuous replication of the viral genome within the host cell  
(d) Destruction of the host cell upon release of new virions

Page 2      Code No. : 20856 E





7. Plant disease which occur periodically are called

- (a) Systemic                      (b) Epidemic  
(c) Sporadic                      (d) Endemic

8. Citrus Canker is caused by

- (a) *Pyricularia oryzae*  
(b) *Xanthomonas citri*  
(c) *Ephelis oryzae*  
(d) *Sclerotium oryzae*

9. Lichen is a combination of

- (a) Algae and Bryophytes  
(b) Algae and Fungi  
(c) Fungi and Bryophytes  
(d) Fungi and Pteridophytes

10. Usnea is

- (a) Fruticose                      (b) Foliose  
(c) Crustose                      (d) Corticoles

Page 3    Code No. : 20856 E

PART B — (5 × 5 = 25 marks)

Answer ALL questions choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) Explain the asexual reproduction of *Aspergillus*.

Or

- (b) List out the general characters of Fungi.

12. (a) What are VAM? Add its importance.

Or

- (b) Highlight the role of fungi in medicine.

13. (a) Write short note on general characteristics of bacteria.

Or

- (b) Summarize the characteristics of Virus.

14. (a) Explain the symptoms, causes and control measures Citrus canker.

Or

- (b) Explain the symptoms, causes and control measures of Tikka disease of groundnut.

Page 4    Code No. : 20856 E  
[P.T.O.]





15. (a) Explain the general characters of Lichens.

Or

- (b) How will you categorize lichens based Internal Morphology?

PART C — (5 × 8 = 40 marks)

Answer ALL questions choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Explain the life cycle of *Puccinia*.

Or

- (b) Summarize the classification of Fungi.

17. (a) Explain the steps involved in industrial production of ethanol.

Or

- (b) Write an essay on economic importance of Fungi.

18. (a) Explain the structure of bacterial cell.

Or

- (b) Identify the glimpses of lytic cycle and lysogenic cycle?

Page 5 Code No. : 20856 E

19. (a) Explain the symptoms, causes and control measures Tobacco mosaic virus.

Or

- (b) Name one important plant diseases of your region. What are their causal organisms? How is infection caused? Suggest methods of control for disease named by you.

20. (a) Illustrate the structure of *Usnea*.

Or

- (b) Elaborate the economic importance of Lichens.

Page 6 Code No. : 20856 E

