

Code No. : 20373 E      Sub. Code : AMBO 63

B.Sc. (CBCS) DEGREE EXAMINATION, APRIL 2023

Sixth Semester

Botany — Core

MICROBIOLOGY

(For those who joined in July 2020 onwards)

Time : Three hours      Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. The process of vaccination was introduced by  
(a) Robert Koch    (b) Edward Jenner  
(c) Louis Pasteur   (d) Alexander Fleming
2. Who is called the father of immunology?  
(a) Edward Jenner  
(b) Anton Von Leeuwenhock  
(c) Robert Koch  
(d) Louis Pasteur

6. T4 bacteriophage was discovered by  
(a) Twort            (b) Ivanowski  
(c) Luc Montagnier (d) Ehrenberg
7. Nicholas appert is the  
(a) Father of fermentation  
(b) Father of bottling  
(c) Father of canning  
(d) Father of pasteurization
8. The toxicity introduced into food by microbes and their products is called  
(a) Food poisoning   (b) Food spoilage  
(c) Food infection   (d) Food preservation
9. Knoll and Ruska designed the  
(a) Phase contrast microscope  
(b) Flourescence microscope  
(c) Polarization microscope  
(d) Electron microscope

3. Blastobacter, seliberia are generally known as  
(a) Binary fission bacteria  
(b) Budding bacteria  
(c) Fragmentation bacteria  
(d) Conidiospores bacteria
4. The process of DNA uptake by the bacteria from the surrounding environment is called  
(a) Bacterial transduction  
(b) Bacterial transformation  
(c) Bacterial conjugation  
(d) Binary fission
5. HIV virus is  
(a) Rod shaped virus  
(b) Spherical shaped virus  
(c) Tadpole shaped virus  
(d) Helical shaped virus

10. The first microscope was discovered by  
(a) Knoll and Rusk  
(b) Jenssen and Hans  
(c) Anton van Leewenhoek  
(d) Erwin Whilhelm muller

PART B — (5 × 5 = 25 marks)

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

Each answer should not exceed 250 words.

11. (a) Write the contribution of Anton van Leeuwenhock and Louis Pasteur.

Or

- (b) Explain five kingdom classification.
12. (a) Demonstrate the growth of bacteria.

Or

- (b) Write the importance of bacteria.

13. (a) Explain the structure of HIV.

Or

(b) Explain the structure of TMV.

14. (a) Explain food spoilage.

Or

(b) Explain food poisoning.

15. (a) Define fermenter.

Or

(b) Write short notes on phase contrast microscope.

PART C — (5 × 8 = 40 marks)

Answer ALL questions by choosing either (a) or (b).  
Each answer should not exceed 600 words.

16. (a) Explain ultrastructure of bacteria.

Or

(b) Explain the nutritional types of bacteria.

17. (a) Explain the reproduction of bacteria.

Or

(b) Explain the phases of growth of bacteria.

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18. (a) Write the structure of bacteriophage with suitable diagram.

Or

(b) Give a detailed account on multiplication of bacteriophage.

19. (a) Explain the procedure of making wine.

Or

(b) Explain the method of food preservation.

20. (a) Explain electron microscope.

Or

(b) Explain fluorescent microscope.

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