



Avinashilingam Institute for Home Science and Higher Education for Women
(Deemed to be University under Category 'A' by MHRD, Estd. u/s 3 of UGC Act 1956)
Re-accredited with 'A+' Grade by NAAC. Recognised by UGC Under Section 12B
Coimbatore - 641 043, Tamil Nadu, India

Bachelor's Degree Examination – June 2021
VI Semester

Class : III UG
Major : Zoology

Time : 3 Hours
Max. Marks : 100

18BZOC22 Microbiology

Part A
Choose the Correct Answer

10×1= 10

1. Who discovered *Mycobacterium tuberculosis*? CO1 K1
a. Koch b. Jenner
c. Pasteur d. Hensen
2. The theory of spontaneous generation was totally disproved by using swan-necked flask by? CO1 K2
a. Lazar Spallanzani b. John Needham
c. Pasteur d. Carolus Linneus
3. The phase of bacterial growth during which bacteria shows Exponential growth curve is called? CO2 K2
a. Lag phase b. Log phase
c. Stationary phase d. Decline phase
4. The generation time for E.coli is CO2 K2
a. 5 minutes b. 10 minutes
c. 15 minutes d. 20 minutes
5. The staphylococcal intoxication refers to the presence of CO3 K3
a. an enterotoxin b. an exotoxin
c. neurotoxin d. mycotoxin
6. Mycotoxins are produced by CO3 K1
a. Bacteria b. Fungi
c. Virus d. yeast
7. While constructing the fermenter, which of the following is not required? CO4 K3
a. High-speed Agitation and Aeration system b. Temperature control system
c. pH control system d. Sample facilities
8. Microbes used for Commercial Production of Penicillin is CO4 K3
a. *Penicillium notatum* b. *Penicillium chrysogenum*
c. *Penicillium citrinum* d. *Penicillium expansum*
9. Which of the following is a set of bacterial diseases? CO5 K3
a. Malaria, Poliomyelitis, Mumps b. Mumps, Cholera, Typhoid
c. Measles, Tuberculosis, Tetanus d. Syphilis, Leprosy, Cholera
10. HIV belongs to the family CO5 K2
a. Adenoviridae b. Herpesviridae
c. Parvoviridae d. Retroviridae

Part B**5 x 6 = 30****Answer ALL questions****Each answer should not exceed 400 words or two pages**

- 11.a. Narrate the scope of Microbiology. CO1 K1
(or)
- 11.b. Classify bacteria based on their composition of cell wall. CO1 K2
- 12.a. State and explain the types of media used for the growth of Microbes. CO2 K3
(or)
- 12.b. Describe the methods used for isolation of Microorganisms. CO2 K1
- 13.a. Write about the causative agents and symptoms associated with Q fever. CO3 K3
(or)
- 13.b. Give a brief note on Botulism. CO3 K3
- 14.a. Draw and describe the basic structure of a Fermenter. CO4 K1
(or)
- 14.b. Elucidate about any one method for sanitary test for Coliforms. CO4 K3
- 15.a. Write in brief about causal organism, symptoms and treatment of Tuberculosis. CO5 K2
(or)
- 15.b. Describe about current situation of Polio in India. CO5 K3

Part C**5 x 12 = 60****Answer ALL questions****Each answer should not exceed 800 words or four pages**

16. a. Discuss about the contribution of some important pioneers in the field of Microbiology. CO1 K2
(or)
- 16.b. Classify Fungi with their general characteristics. CO1 K4
- 17.a. Describe about the different sterilization methods used in medical laboratories. CO2 K2
(or)
- 17.b. Illustrate the different phases in bacterial growth kinetics. CO2 K3
- 18.a. Define Food spoilage. Describe the various factors involved in food spoilage. CO3 K1
(or)
- 18.b. Elaborate the different methods used for preservation of food. CO3 K3
- 19.a. Explain the steps involved in industrial production of ethanol. CO4 K3
(or)
- 19.b. Write the primary, secondary and tertiary treatment processes used in waste water treatment. CO4 K3
- 20.a. Give a detailed account of clinical types and therapy of dermatophytosis. CO5 K2
(or)
- 20.b Write an essay on symptoms, treatment and prevention of AIDS. CO5 K2
