

TELANGANA UNIVERSITY
S.S.R. DEGREE COLLEGE, NIZAMABAD (C.C:5029)
B.Sc. MICROBIOLOGY – V SEMESTER
MDC: MICROBIOLOGY AND HUMAN HEALTH
INTERNAL ASSESSMENT - 1 QUESTION BANK

SECTION – A: MULTIPLE CHOICE QUESTIONS

1. Who is known as the “Father of Microbiology”?

- A) Robert Koch B) Louis Pasteur C) Edward Jenner D) Antonie van Leeuwenhoek

Answer: D

2. Antonie van Leeuwenhoek is famous for:

- A) Discovering vaccination B) Developing germ theory
C) First observing microorganisms D) Discovering penicillin

Answer: C

3. Edward Jenner is associated with the development of:

- A) Smallpox vaccination B) Pasteurization C) Germ theory D) Culture media

Answer: A

4. Robert Koch is particularly known for his work on:

- A) Vaccination B) Bacterial diseases and Koch’s postulates C) Fermentation D) Microscopy

Answer: B

5. The process of growing microorganisms in the laboratory using nutrient substances is called:

- A) Staining B) Inoculation C) Culture D) Sterilization

Answer: C

6. Which of the following is a morphological characteristic of bacteria?

- A) Shape B) Antigenicity C) Pathogenicity D) Antibiotic resistance

Answer: A

7. The technique used to increase the visibility of microorganisms under a microscope is:

- A) Cultivation B) Staining C) Filtration D) Incubation

Answer: B

8. Microorganisms that cannot be grown using currently available laboratory culture methods are called:

- A) Fast-growing microorganisms B) Aerobic microorganisms
C) Unculturable microorganisms D) Thermophilic microorganisms

Answer: C

9. Which scientist contributed significantly to the development of the germ theory of disease?

- A) Louis Pasteur B) Edward Jenner C) Leeuwenhoek D) Alexander Fleming

Answer: A

10. Culture media are mainly used for:

- A) Killing microorganisms B) Growing microorganisms C) Staining microorganisms D) Preserving antibodies

Answer: B

11. Bacteria that provide beneficial effects to human health when consumed in adequate amounts are called:

- A) Pathogens B) Parasites C) Probiotics D) Toxins

Answer: C

12. Prebiotics are substances that:

- A) Kill all bacteria B) Promote the growth of beneficial microorganisms
C) Cause infectious diseases D) Produce antibodies

Answer: B

13. The collection of microorganisms living in a particular environment of the human body is called:

- A) Human microbiome B) Antigen C) Vaccine D) Culture medium

Answer: A

14. Which bacterium is commonly associated with typhoid fever?

- A) Mycobacterium tuberculosis B) Salmonella Typhi C) Treponema pallidum D) Vibrio cholerae

Answer: B

15. Tuberculosis is caused by:

- A) Salmonella Typhi B) Treponema pallidum C) Mycobacterium tuberculosis D) Influenza virus

Answer: C

16. Syphilis is caused by:

- A) Treponema pallidum B) Mycobacterium tuberculosis C) HIV D) Dengue virus

Answer: A

17. SARS-CoV-2 is the causative agent of:

- A) Influenza B) COVID-19 C) Hepatitis D) Malaria

Answer: B

18. Malaria is transmitted by the bite of:

A) Housefly B) Aedes mosquito C) Female Anopheles mosquito D) Culex mosquito

Answer: C

19. Dengue is mainly transmitted by:

A) Aedes mosquito B) Female Anopheles mosquito C) Housefly D) Sandfly

Answer: A

20. Which of the following is a viral disease?

A) Typhoid B) Tuberculosis C) Syphilis D) HIV infection

Answer: D

SECTION – B: FILL IN THE BLANKS

1. _____ is known as the Father of Microbiology.

Answer: Antonie van Leeuwenhoek

2. Edward Jenner developed the first successful vaccine against _____.

Answer: Smallpox

3. Louis Pasteur made important contributions to the _____ theory of disease.

Answer: Germ

4. _____ developed the postulates used to establish the relationship between microorganisms and diseases.

Answer: Robert Koch

5. The process of growing microorganisms under controlled laboratory conditions is called _____.

Answer: Cultivation/Culture

6. The study of the shape and arrangement of bacteria is called bacterial _____.

Answer: Morphology

7. _____ is used to increase the contrast and visibility of microorganisms under a microscope.

Answer: Staining

8. Nutrient substances used for the growth of microorganisms in the laboratory are called _____ media.

Answer: Culture

9. Microorganisms that cannot be grown by conventional laboratory culture techniques are called _____ microorganisms.

Answer: Unculturable

10. The study of microorganisms is called _____.

Answer: Microbiology

11. Beneficial live microorganisms that provide health benefits are called _____.

Answer: Probiotics

12. Substances that promote the growth or activity of beneficial microorganisms are called _____.

Answer: Prebiotics

13. The complete community of microorganisms associated with the human body is called the human _____.

Answer: Microbiome

14. _____ is the bacterial disease caused by Salmonella Typhi.

Answer: Typhoid

15. Tuberculosis is caused by _____.

Answer: Mycobacterium tuberculosis

16. Syphilis is caused by the bacterium _____.

Answer: Treponema pallidum

17. The virus responsible for COVID-19 is called _____.

Answer: SARS-CoV-2

18. Malaria is transmitted by the female _____ mosquito.

Answer: Anopheles

19. _____ is a mosquito-borne viral disease commonly transmitted by Aedes mosquitoes.

Answer: Dengue

20. HIV stands for _____.

Answer: Human Immunodeficiency Virus

SECTION – C: DESCRIPTIVE QUESTIONS

1. Explain the contributions of Robert Koch.

2. Explain the different types of microorganisms.

3. What are culture media?

4. Explain the role of beneficial bacteria in human health.

5. Describe the major bacterial, viral and insect-borne diseases.