

# chapter 1

⚠ This is a preview of the draft version of the quiz

<b>Quiz Type</b>	Graded Quiz
<b>Points</b>	64
<b>Assignment Group</b>	Assignments
<b>Shuffle Answers</b>	No
<b>Time Limit</b>	No Time Limit
<b>Multiple Attempts</b>	No
<b>View Responses</b>	Always
<b>Show Correct Answers</b>	Immediately
<b>One Question at a Time</b>	No

Due	For	Available from	Until
-	Everyone	-	-

Preview

Score for this quiz: 0 out of 64 \*

Submitted Oct 17 at 7:21am

This attempt took less than 1 minute.



Unanswered
**Question 1**
0 / 1 pts

Microorganisms play an important role in each of the following processes except:

- Causing infection
- Decomposing organic material
- O<sub>2</sub> production
- Food production
- Air pollution

Correct Answer

Unanswered
**Question 2**
0 / 1 pts

Organisms below are microbes except:

- Saccharomyces*
- Plasmodium*
- E. coli*

*Methanogens*

Correct Answer

HIV

Unanswered

### Question 3

0 / 1 pts

Disease-causing microorganisms are called \_\_\_\_\_.

microbes

bacteria

COVID-19

Correct Answer

pathogens

infection

Unanswered

### Question 4

0 / 1 pts

Common commercial benefits of microorganisms include synthesis of \_\_\_\_\_.

riboflavin

acetone

insulin

ethanol

Correct Answer

All of these

Unanswered

### Question 5

0 / 1 pts

The factors that contribute to the rising incidence of antibiotic resistance include:

overuse and misuse of antibiotics.

agricultural use of antibiotics.

random mutations in bacterial genomes.

global travel and trade.

Correct Answer

All of these.



Unanswered

### Question 6

0 / 1 pts

The formal system for classifying and naming organisms was developed by \_\_\_\_\_.

Robert Koch

Louis Pasteur

Aristotle

Correct Answer

Carolus Linnaeus

None of these

Unanswered

### Question 7

0 / 1 pts

In the name *Staphylococcus aureus*, *Staphylococcus* is the \_\_\_\_\_ and *aureus* is the \_\_\_\_\_.

genus, species

domain, kingdom

species, genus

kingdom, domain

family, class

Correct Answer

Unanswered

### Question 8

0 / 1 pts

A prokaryotic cell may possess all of the following except:

Flagella

A nucleus

Ribosomes

A cell wall

A cell membrane

Correct Answer

Unanswered

### Question 9

0 / 1 pts

Which of the following does not belong to viruses?

Organelles

Correct Answer

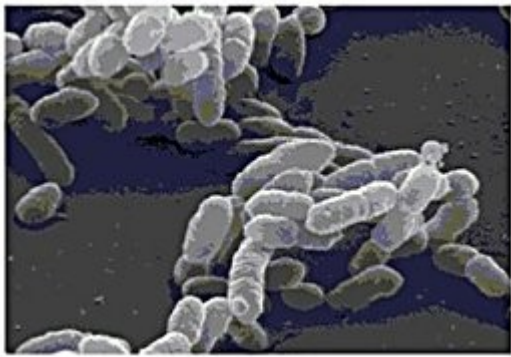
- Nucleic acid
- Envelope
- Capsid
- Protein coat

Unanswered

### Question 10

0 / 1 pts

Figure 1.1



The bacterial shape of the cells in the scanning electron micrograph shown in Figure 1.1 would best be described as \_\_\_\_\_.

Correct Answer

- bacillus
- spiral
- coccus
- ovoid
- columnar

Unanswered

### Question 11

0 / 1 pts

Structures that allow extensive motility in protozoans include \_\_\_\_\_.

- cilia
- flagella
- pseudopods
- cilia and pseudopods only
- cilia, flagella, and pseudopods

Correct Answer

Unanswered

### Question 12

0 / 1 pts

Viruses are not considered living because they \_\_\_\_\_.

Correct Answer

- cannot reproduce
- are structurally very simple
- can only be visualized using an electron microscope
- are typically associated with disease
- are ubiquitous in nature

Unanswered

### Question 13

0 / 1 pts

Microbes that naturally and mutualistically live in the human body and provide protection and production of essential vitamins and other compounds are called the \_\_\_\_\_.

- transient microbiota
- pathogenic microorganisms

Correct Answer

- normal microbiota
- virulent microorganisms
- opportunistic microbiota

Unanswered

### Question 14

0 / 1 pts

\_\_\_\_\_ do not belong to the three domains of life.

Correct Answer

- Viruses
- Archaea
- Bacteria
- Eukarya

Unanswered

### Question 15

0 / 1 pts

The classification system that categorizes all life forms into three domains based on their cellular structures was devised by whom?

- Carolus Linnaeus
- Anton van Leeuwenhoek

Correct Answer

- Carl Woese
- Louis Pasteur
- Robert Koch

Unanswered

### Question 16

0 / 1 pts

Archaea differ from bacteria in that archaea \_\_\_\_\_.

Correct Answer

- have cell walls composed of pseudomurein
- lack of true nuclei
- use organic compounds for food
- reproduce by binary fission
- are prokaryotic

Unanswered

### Question 17

0 / 1 pts

\_\_\_\_\_ is credited with first observing cells.

Correct Answer

- Robert Hooke
- Anton van Leeuwenhoek
- Robert Koch
- Louis Pasteur
- Carolus Linnaeus

Unanswered

### Question 18

0 / 1 pts

\_\_\_\_\_ is credited with first observing microorganisms.

Correct Answer

- Robert Hooke
- Anton van Leeuwenhoek
- Robert Koch
- Louis Pasteur
- Carolus Linnaeus



Unanswered

Question 19

0 / 1 pts

Biogenesis refers to the \_\_\_\_\_.

spontaneous generation of organisms from nonliving matter

Correct Answer

life forms from preexisting life

development of aseptic technique

germ theory of disease

Unanswered

Question 20

0 / 1 pts

If you were setting up an experiment to disprove spontaneous generation theory in a liquid medium, which of the following would be essential to the experiment?

Supplying the liquid with nutrients

Starting with a liquid that contains microorganisms

Adding antibiotics to the liquid

Correct Answer

Using a sterile liquid and preventing exposure to microorganisms

Adding carbon dioxide to the liquid

Unanswered

Question 21

0 / 1 pts

The arguments supporting spontaneous generation theory were finally disproved by \_\_\_\_\_.

Correct Answer

Louis Pasteur

Francesco Redi

Rudolf Virchow

John Needham

Lazzaro Spallanzani

Unanswered

Question 22

0 / 1 pts

Regarding Louis Pasteur's experiments with the S-neck flask, which of the following statements is true?

Air exchange was involved.

- A food source was provided.
- The possibility of contamination was removed.
- All preexisting microorganisms were killed.

Correct Answer

- Air exchange occurred, a food source was provided, preexisting microorganisms were killed and contamination was prevented.

Unanswered

### Question 23

0 / 1 pts

The microbial metabolic process of converting sugars to alcohol is known as \_\_\_\_\_.

Correct Answer

- fermentation
- pasteurization
- tyndallization
- lyophilization
- alcoholism

Unanswered

### Question 24

0 / 1 pts

The concept that a microbe could cause disease was established by whom?

- Louis Pasteur
- Joseph Lister
- Robert Koch
- August Paul von Wasserman
- Ignaz Semmelweis

Correct Answer

Unanswered

### Question 25

0 / 1 pts

\_\_\_\_\_ used phenol as a wound disinfectant.

Correct Answer

- Joseph Lister
- Ignaz Semmelweis
- Louis Pasteur
- Jonh Snow





Robert Koch

Unanswered

### Question 26

0 / 1 pts

Mycology is the study of \_\_\_\_\_.

Correct Answer

- fungi
- bacteria
- plants
- protists
- animals

Unanswered

### Question 27

0 / 1 pts

\_\_\_\_\_ discovered that a bacterium causes anthrax and provided the experimental steps to demonstrate that a specific microbe causes a specific disease. These experimental steps are called the \_\_\_\_\_.

Correct Answer

- Robert Koch, Koch's postulates
- Louis Pasteur, Pasteur's postulates
- Robert Koch, Pasteur's postulates
- Louis Pasteur, Koch's postulates
- All of these

Unanswered

### Question 28

0 / 1 pts

The protection from diseases is called \_\_\_\_\_.

Correct Answer

- vaccination
- natural protection
- immunity
- All of these
- None of these

Unanswered

### Question 29

0 / 1 pts

Edward Jenner inoculated a person with cowpox virus, who was then immune from \_\_\_\_\_.

Correct Answer

- smallpox
- anthrax
- diphtheria
- AIDS
- rabies

Unanswered

### Question 30

0 / 1 pts

Treatment of disease with chemicals is called \_\_\_\_\_.

- chemo
- medication
- antimicrobial therapy

Correct Answer

- chemotherapy
- All of these

Unanswered

### Question 31

0 / 1 pts

Which of the following findings was essential for Edward Jenner's vaccination process?

Correct Answer

- Exposure to a pathogen may induce immunity.
- A weakened microorganism will not cause disease.
- Someone who recovers from a disease will not acquire that disease again.
- Disease is caused by viruses.
- Pathogenic microorganisms infect all humans and animals in the same manner.

Unanswered

### Question 32

0 / 1 pts

\_\_\_\_\_, the first antibiotic, was discovered following an accident by \_\_\_\_\_.

Correct Answer

- Penicillin, Alexander Fleming

Penicillin, Paul Ehrlich

Penicillin, Edward Jenner

Penicillin, Robert Koch

Penicillin, Joseph Lister

Unanswered

### Question 33

0 / 1 pts

The first synthetic drugs are \_\_\_\_\_.

salvarsan

penicillin

sulfonamides

salvarsan and penicillin

Correct Answer

salvarsan and sulfonamides

Unanswered

### Question 34

0 / 1 pts

Fungi are studied by \_\_\_\_\_.

virologists

bacteriologists

parasitologists

Correct Answer

mycologists

herpetologists

Unanswered

### Question 35

0 / 1 pts

Recombinant DNA technology refers to the \_\_\_\_\_.

- study of bacterial ribosomes
- study of the function of genes
- interaction between human and bacterial cells
- synthesis of proteins from genes

Correct Answer

- DNA made from two different sources

Unanswered

### Question 36

0 / 1 pts

Molecular biology includes the study of \_\_\_\_\_.

- DNA replication
- transcription
- translation
- regulation of gene expression

Correct Answer

- All of these

Unanswered

### Question 37

0 / 1 pts

Microorganisms are essential to our life. The following are some examples of benefits except:

- Alternative fuel production
- Bioremediation
- Gene therapy
- Agriculture

Correct Answer

- Robotic production

Unanswered

### Question 38

0 / 1 pts

The major food producers for other living organisms is/are \_\_\_\_\_.

- plants
- cyanobacteria

algae

Correct Answer

All of these

None of these

Unanswered

### Question 39

0 / 1 pts

Recombinant DNA technology can apply in all except:

Vaccine production

Gene therapy

Hormone synthesis

Drug production

Correct Answer

Cloning humans

Unanswered

### Question 40

0 / 1 pts

Which statement below is false about normal microbiota?

Normal microbiota colonize the body permanently.

Normal microbiota provide protection.

Correct Answer

Normal microbiota cannot cause diseases.

Normal microbiota can provide essential vitamins and antimicrobial compounds.

Normal microbiota is distinct from person to person.

Unanswered

### Question 41

0 / 1 pts

Which of the following statements about biofilms is false?

Correct Answer

Biofilms are more sensitive to antibiotics.

Biofilms in pipes can block the flow of water.

Biofilms in your body protect mucous membranes from harmful microbes.

Biofilms on medical devices cause infections.

Biofilms on rocks provide food for animal life.

Unanswered

### Question 42

0 / 1 pts

Development of emerging infectious disease can be a result of the following except:

- Microbial mutation
- Modern transportation

Correct Answer

- Vaccination of COVID-19
- Changes in the environment
- Overuse of antibiotics

Unanswered

### Question 43

0 / 1 pts

All of the following are true concerning emerging infectious diseases except:

- They always involve sporadic cases in endemic areas.
- They include newly described infectious agents.
- Known pathogens develop variants such as SARS-CoV-2 and COVID-19.
- Known diseases spread to new regions or populations.
- They result from human exposure to a pathogen due to ecological changes.

Correct Answer

Unanswered

### Question 44

0 / 1 pts

Which disease below is not categorized as an emerging infectious disease?

- HIV/AIDS
- Bovine spongiform encephalopathy

Correct Answer

- Parkinson's disease
- Ebola hemorrhagic fever (EHF)
- Monkeypox

Unanswered

### Question 45

0 / 1 pts

The below are examples of a biofilm except:

- Archaea as part of the plankton community in the open ocean

Correct Answer

- Dental plaque
- Vegetations on a patient heart valve
- Slimy layer on riverbed rocks
- Infection of a patient catheter

Unanswered

### Question 46

0 / 1 pts

Infectious disease is almost totally eradicated in our world.

True

Correct Answer

False

Unanswered

### Question 47

0 / 1 pts

A student has obtained a sample of pond water for study. Using the high-power objective lens from a light microscope, he observes several cells with nuclei. He concludes that the cells are not bacteria.

True

Correct Answer

False

Unanswered

### Question 48

0 / 1 pts

Pasteurization is the process of removing most food spoilage causing pathogens by utilizing high temperature to kill all microorganisms present.

True

Correct Answer

False

Unanswered

### Question 49

0 / 1 pts

Anton van Leeuwenhoek was the first microbiologist to use a microscope to examine environmental samples for the presence of microorganisms.

True

Correct Answer

False



**Unanswered** **Question 50** **0 / 1 pts**

Spontaneous generation theory refers to living cells arising from preexisting cells.

True

**Correct Answer**  False

**Unanswered** **Question 51** **0 / 1 pts**

Most microbes are dangerous.

True

**Correct Answer**  False

**Unanswered** **Question 52** **0 / 1 pts**

All cells possess a cell wall.

True

**Correct Answer**  False

**Unanswered** **Question 53** **0 / 1 pts**

All pathogens known to infect humans have been identified.

True

**Correct Answer**  False

**Unanswered** **Question 54** **0 / 1 pts**

The first antibiotic was discovered by Paul Ehrlich.

True

**Correct Answer**  False

**Unanswered** **Question 55** **0 / 1 pts**





Enzymes from *Bacillus* and some other microbes can be used to remove stains on clothing.

Correct Answer

- True
- False

Unanswered

Question 56

0 / 1 pts

Missing or defective genes in human cells can be replaced in gene therapy.

Correct Answer

- True
- False

Unanswered

Question 57

0 / 1 pts

Emerging infectious diseases (EIDs) are new diseases and diseases increasing in incidence.

Correct Answer

- True
- False

Unanswered

Question 58

0 / 1 pts

Resistance factors include skin, stomach acid, antimicrobial chemicals, and surgery.

Correct Answer

- True
- False

Unanswered

Question 59

0 / 1 pts

Zika virus, COVID-19, Ebola virus, and small pox virus are examples of emerging infectious pathogens.

Correct Answer

- True
- False

Unanswered

Question 60

Not yet graded / 1 pts

List and describe an emerging infectious disease that you know. What are some possible causes of this



emerging infectious disease?

Your Answer:

Unanswered

**Question 61**

Not yet graded / 1 pts

Differentiate prokaryotic and eukaryotic cells based on the cell structures, metabolism, habitats, and reproductions.

Your Answer:

Unanswered

**Question 62**

Not yet graded / 1 pts

Describe the function and the importance of S-necked flasks in Louis Pasteur's experiments in disproving spontaneous generation theory?

Your Answer:

Unanswered

**Question 63**

Not yet graded / 1 pts

Explain the germ theory of disease and discuss why this theory is important.

Your Answer:

Unanswered

**Question 64**

Not yet graded / 1 pts

Explain the concepts of normal microbiota and transient microbiota and discuss the effect of their pathogenicity.

Your Answer:



Quiz Score: 0 out of 64