

1. Question :

Antoni van Leeuwenhoek was the first person in history to

Student Answer:

- use a magnifying glass.
-
- develop a taxonomic system.
- view protozoa and bacteria.
-
- disprove spontaneous generation.
-
- prove the germ theory.

Points Received:

0 of 1

Comments:

Question 2 Question :

Microbes that can live in the presence or absence of oxygen are called

Student Answer:

- anaerobes.
- facultative anaerobes.
-
- obligate parasites.
-
- archaea.
-
- prokaryotes.

Points Received:

1 of 1

Comments:

Question 3 Question :

Which of the following scientists provided evidence in favor of the concept of spontaneous generation?

Student Answer:

Pasteur



Needham



Redi



Buchner



Spallanzani



Points Received:

0 of 1

Comments:

Question 4 Question :

The microbial production of alcohol from sugar is known as

Student Answer:



fermentation.



pasteurization.



metabolism.



abiogenesis.



antisepsis.



Points Received:

1 of 1

Comments:

Question 5 Question :

Which of the following statements concerning Koch's postulates is false?

Student Answer:



Koch's postulates cannot be used to demonstrate the cause of

all diseases.

- A suspected pathogen must be able to be grown in the
 laboratory.
- All of Koch's postulates must be satisfied before an organism
 can be proven to cause a particular disease.
- Koch's postulates involve the experimental infection of
 susceptible hosts.
- A suspected pathogen must be found in the majority of
 individuals with a particular disease.

Points Received: **0 of 1**

Comments:

Question 6 Question :

The study of the body's defenses against pathogens is called

Student Answer: etiology.

immunology.

chemotherapy.

molecular biology.

epidemiology.

Points Received: **1 of 1**

Comments:

Question 7 Question :

Which of the following is NOT a characteristic of viruses?

Student Answer: they are visible with a light microscope.

they are acellular.

they are composed of genetic material and protein.

they are smaller than prokaryotic cells.

they are obligatory parasites.

Points Received: **1 of 1**

Comments:

Question 8 Question :

Saccharomyces cerevisiae is an example of which of the following types of microbes?

Student Answer:



fungus

protozoan

prokaryote

alga

virus

Points Received: **1 of 1**

Comments:

Question 9 Question :

Proteins that promote chemical reactions in the cell are called

Student Answer:

spores.

enzymes.



genes.

protozoa.

flagella.



Points Received:	1 of 1
Comments:	

Question 10 Question :

Which of the following scientists was the first to develop a taxonomic system for classifying organisms?

Student Answer:



Linnaeus



Needham



Leeuwenhoek



Lister



Pasteur



Points Received:	1 of 1
Comments:	

Question 11 Question :

Robert Koch was involved in research on all of the following topics EXCEPT

Student Answer:

the cause of anthrax.



the cause of fermentation.



development of a method to prove the cause of an infectious disease.



the cause of tuberculosis.



techniques for isolating microbes in the laboratory.



Points Received: **0 of 1**

Comments:

Question 12 Question :

- Microorganisms characterized by the absence of a nucleus are called

Student Answer:

fungi.



pathogens.



eukaryotes.



✓ prokaryotes.



viruses.



Points Received: **1 of 1**

Comments:

Question 13 Question :

- The term _____ literally means "produces disease."

Student Answer:

prokaryote



✓ pathogen



nosocomial



facultative anaerobe



animalcule



Points Received: **1 of 1**

Comments:

Question 14 Question :

- The study of the causation of disease is known as

Student Answer:

epidemiology.



immunology.



biotechnology.



 etiology.



chemotherapy.



Points Received:

1 of 1

Comments:

Question 15 Question :

- The study of the occurrence, distribution, and spread of disease is known as

Student Answer:

biotechnology.



 epidemiology.



molecular biology.



serology.



biochemistry.



Points Received:

1 of 1

Comments:

Question 16 Question :

- Short, hairlike structures used only by eukaryotic cells for movement are called

Student Answer:

pili.



flagella.



fimbriae.



pseudopodia.



cilia.



Points Received:

1 of 1

Comments:

Question 17 Question :

Which of the following is NOT a component of bacterial cell walls?

Student Answer:

peptidoglycan



✗ lipoteichoic acids



mycolic acid



tetrapeptide



✓ tubulin



Points Received:

0 of 1

Comments:

Question 18 Question :

Endospores survive a variety of harsh conditions in part because of the presence of

Student Answer:

mycolic acid.



lipopolysaccharide.



- hopanoids.
- dipicolinic acid.
- glycoproteins.

Points Received: **0 of 1**
Comments:

Question 19 Question :

When cells are placed in a hypertonic solution, they lose water and shrivel. This process is called

- Student Answer: crenation.
- endocytosis.
- passive transport.
- periplasm.
- plasmalemma.

Points Received: **0 of 1**
Comments:

Question 20 Question :

All of the following are common to both the Gram stain and the acid-fast stain EXCEPT

- Student Answer: primary stain.
- counterstain.
- a decolorizing agent.

- a mordant.
- a decolorizing agent and a counterstain.

Points Received: **0 of 1**
Comments:

Question 21 Question :

- A patient suffering from tuberculosis could be diagnosed by use of the _____ stain.

- Student Answer: Gram
- endospore
- acid-fast
- flagellar
- capsule

Points Received: **0 of 1**
Comments:

Question 22 Question :

- Carbolfuchsin is the _____ in the acid-fast stain.

- Student Answer: primary stain
- mordant
- decolorizer
- counterstain
- fixing reagent

Points Received: **0 of 1**

Comments:

Question 23 Question :

- The kingdoms included in the Linnaeus system are

Student Answer:

Animalia and Prokaryotae.



Protista and Plantae.



Fungi and Protista.



✓ Animalia and Plantae.



Prokaryotae and Protista.



Points Received: **1 of 1**

Comments:

Question 24 Question :

- The rules of naming organisms are called

Student Answer:

taxonomy.



✓ nomenclature.



classification.



binomials.



identification.



Points Received: **1 of 1**

Comments:

Question 25 Question :

In the Gram stain procedure, iodine serves as a

Student Answer:

counterstain.



decolorizing agent.



 mordant.



primary stain.



fixative.



Points Received:

1 of 1

Comments:

Question 26 Question :

Crystal violet is the _____ in the Gram stain.

Student Answer:



counterstain



decolorizing agent



mordant



neutralizing agent



 primary stain



Points Received:

0 of 1

Comments:

Question 27 Question :

The _____ makes use of malachite green.

- Student Answer: negative stain
-
- flagellar stain
-
- endospore stain
-
- electron microscopy stain
-
- acid-fast stain
-

Points Received: **1 of 1**

Comments:

Question 28 Question :

The molecule that an enzyme acts upon is known as its

- Student Answer: substrate.
-
- coenzyme.
-
- apoenzyme.
-
- holoenzyme.
-
- catalyst.
-

Points Received: **0 of 1**

Comments:

Question 29 Question :

Pyruvic acid is a product of

- Student Answer: the Krebs cycle.
-
- fermentation.
-

glycolysis.



the Entner-Doudoroff pathway.



both glycolysis and the Entner-Doudoroff pathway.



Points Received: **0 of 1**

Comments:

Question 30 Question :

- In microbiology, the term *growth* usually refers to an increase in

Student Answer: a microbe's size.



the number of microbial cells.



the amount of ATP produced.



the number and size of microbial cells.



the number and size of microbial cells and the amount of ATP



produced.

Points Received: **0 of 1**

Comments:

Question 31 Question :

- Human pathogens are classified as

Student Answer: thermoduric.



thermophiles.



mesophiles.



hyperthermophiles.



psychrophiles.

Points Received: **0 of 1**
Comments:

Question 32 Question :

Organisms that can grow with or without oxygen present are

- Student Answer: obligate aerobes.
 facultative anaerobes.
 aerotolerant anaerobes.
 obligate anaerobes.
 either facultative anaerobes or aerotolerant anaerobes.

Points Received: **0 of 1**
Comments:

Question 33 Question :

Another term for the logarithmic growth of bacterial cells is

- Student Answer: generation time.
 exponential growth.
 arithmetic growth.
 absorbance.
 binary fission.

Points Received: **1 of 1**

Comments:

Question 34 Question :

During the _____ of growth, cells are dying faster than new cells are being produced.

Student Answer:

- death phase
- lag phase
- log phase
- stationary phase
- longitudinal phase

Points Received: **0 of 1**

Comments:

Question 35 Question :

Metabolic activity is at maximum level in the _____ of growth.

Student Answer:

- lag phase
- log phase
- death phase
- stationary phase
- intermediate phase

Points Received: **1 of 1**

Comments:

Question 36 Question :

Cells are rapidly growing and dividing during the _____ of growth.

Student Answer:

death phase



lag phase



log phase



stationary phase



indeterminate phase



Points Received:

1 of 1

Comments:

Question 37 Question :

Microaerophiles are microbes that grow best at low

Student Answer:

carbon dioxide levels.



pH values.



hydrostatic pressure.



oxygen levels.



salt concentrations.



Points Received:

1 of 1

Comments:

Question 38 Question :

An acidophile thrives under conditions of low

Student Answer: carbon dioxide levels.



salt concentrations.



oxygen levels.



hydrostatic pressure.



pH.



Points Received: **1 of 1**

Comments:

Question 39 Question :

The bacterial chromosome is

Student Answer: usually circular.



found in a nucleoid.



found in a nucleus.



✓ both circular and found in a nucleoid.



✗ both circular and found in a nucleus.



Points Received: **0 of 1**

Comments:

Question 40 Question :

Which of the following is an example of sanitization?

Student Answer: ✓ A public toilet is treated with disinfectants.



A surgeon washes her hands before surgery.



Heat is used to kill potential pathogens in apple juice.

An autoclave is used to prepare nutrient agar.

A nurse prepares an injection site with an alcohol swab.

Points Received: **1 of 1**

Comments:

Question 41 Question :

Aseptic means

Student Answer:

sterile.

free of all microbes.

clean.

sanitized.

✓ free of pathogens.

Points Received: **1 of 1**

Comments:

Question 42 Question :

Which of the following is a sterilizing agent?

Student Answer:

ozone

✗ hydrogen peroxide

✓ peracetic acid

dish soap

ozone and hydrogen peroxide

Points Received: **0 of 1**
Comments:

Question 43 Question :

The process of filtration is a(n)

Student Answer: disinfectant method.

sterilizing method.

sanitization method.

antiseptic procedure.

ineffective method for removing microbes.

Points Received: **1 of 1**
Comments:

Question 44 Question :

Which of the following is NOT a characteristic of a genus name?

Student Answer: it is usually an adjective.

it is written before the specific epithet.

it is always capitalized.

it is either underlined or in italics.

it is one of two names used to identify an organism.

Points Received: **0 of 1**

Comments:

Question 45 Question :

- Acidic dyes

Student Answer:

work best in low pH environments.



are negatively charged.



are used for staining negatively charged molecular structures.



are lipid soluble.



✓ are negatively charged and work best at low pH.



Points Received:

0 of 1

Comments:

Question 46 Question :

- All of the following are associated with smear preparation EXCEPT

Student Answer:

✓ agglutination of the specimen.



spreading the specimen onto a slide.



fixation using heat.



✗ killing the microbes in the specimen.



fixation using methanol or formalin.



Points Received:

0 of 1

Comments:

Question 47 Question :

- The Gram stain works because of differences in the _____ of

bacteria.

Student Answer: genetic characteristics



cell walls



cell membranes



antigens



capsules



Points Received: **0 of 1**

Comments:

Question 48 Question :

The metabolic processes called fermentation

Student Answer: produce substrates for the Krebs cycle.



are alternatives for the pentose phosphate pathway.



use an organic molecule as a final electron acceptor.



occur only when oxygen is readily available.



produce substrates for glycolysis.



Points Received: **1 of 1**

Comments:

Question 49 Question :

Which of the following is an incorrect pairing?

Student Answer: protozoa: multicellular

fungi: cell walls

algae: aquatic and marine habitats

prokaryotes: no nuclei

viruses: acellular parasites

Points Received: **1 of 1**

Comments:

Question 50 Question :
Who discovered penicillin?

Student Answer: Fleming

Ehrlich

Kitasato

Pasteur

Domagk