

For the examination of microbial cells we require the use of?

A. High-power microscope

B. Low-power microscope

C. High-power microscope at a magnification of about 1,000 diameters

D. Low-power microscope at a magnification of about 1,000 diameters

Lipopolysaccharide in cell walls is characteristic of?

- A. Gram-positive bacteria
- B. Gram-negative bacteria
- C. Fungi
- D. Algae

Which microorganism(s) among the following perform photosynthesis by utilizing light?

- A. Cyanobacteria
- B. Fungi
- C. Viruses
- D. Cyanobacteria, Fungi and Viruses

Growth of microbes in a solid media is identified by the formation of?

- A. Pellicle at the top of media
- B. Colonies
- C. Sediment at the bottom
- D. Turbidity

Which among the following are produced by microorganisms?

A. Fermented dairy products

B. Breads

C. Alcoholic beverages

D. Fermented dairy products, breads and alcoholic beverages

What are the blood serum proteins produced by animals called?

- A. Enzymes
- B. Antibodies
- C. Amino acids
- D. Toxins

The DNA molecule of microorganisms is made up of base pairs of _____

- A. guanine-cytosine
- B. adenine-thymine
- C. adenine-cytosine
- D. guanine-cytosine and adenine-thymine

The DNA of *Klebsiella pneumonia* has a moles % G+C content of?

A. 70-71

B. 50-53

C. 56-58

D. 32-35

Plasmids are circular DNA molecules capable of autonomous replication.

A. True

B. False

C. Not always true

D. Can't say, incomplete information given.

Bdellovibrios come under which group of microorganisms?

A. Viruses

B. Bacteria

C. Fungi

D. Algae

Type strain is used for referring to?

A. Species

B. Genus

C. Family

D. Division

The correct order of taxonomic groups from higher to lower rank is?

- A. Kingdom—Order—Class—Family
- B. Order—Class—Division—Family—Genus—Species
- C. Kingdom—Order—Division—Family—Class—Genus—Species
- D. Kingdom—Division—Class—Order—Family—Genus—Species

% Similarity (%S) of each strain to every other strain is calculated by which method?

- A. Intuitive Method
- B. Numerical Taxonomy
- C. Genetic Relatedness
- D. DNA homology experiments

Two organisms which are very closely related to each other have which of the following property?

- A. Similar mol% G+C values
- B. Different mol% G+C values
- C. Similar mol% G+C values and heteroduplexes are formed
- D. Different mol% G+C values and heteroduplexes are not formed

What are ribosomes composed of?

A. Proteins

B. DNA

C. RNA

D. Proteins and RNA

If two organisms are distantly related and show no DNA homology there still may be similarity in their rRNA cistrons.

A. True

B. False

C. True for eukaryotes only

D. True for prokaryotes only

Which of the following are characteristics of archaeobacterial different from eubacteria?

A. Methane producers

B. Extreme halophiles

C. Thermoacidophiles

D. Methane-producers, extreme halophiles, and thermoacidophiles

Which among the following come under Gram-positive eubacteria?

A. Clostridium

B. Actinomyces

C. Rhizobium

D. Clostridium, Actinomyces

Which among the following kingdoms were proposed by Whittaker?

A. Monera

B. Protista, Fungi

C. Plantae, Animalia

D. Monera, Protista, Fungi, Plantae, Animalia

According to Bergey's Manual of Systematic Bacteriology, prokaryotes that lack a cell wall belong to the group?

A. Gracilicutes

B. Firmicutes

C. Tenericutes

D. Mendosicutes