1 Chapter 11 / Prokaryotes: Domains Bacteria & Archaea

2 If you Gram-stained the bacteria that live in the human intestine, you would expect to find mostly
   a. gram-positive cocci.
   b. gram-negative rods.
   c. gram-positive, endospore-forming rods.
   d. gram-negative, nitrogen-fixing bacteria.
   e. all of the above

3 Which of the following does not belong with the others?
   a. Enterobacteriales
   b. Lactobacillales
   c. Legionellales
   d. Pasteurellales
   e. Vibrionales

4 Pathogenic bacteria can be
   a. motile.
   b. rods.
   c. cocci.
   d. anaerobic.
   e. all of the above

5 Which of the following is an intracellular parasite?
   a. Rickettsia
   b. Mycobacterium
   c. Bacillus
   d. Staphylococcus
   e. Streptococcus

6 Which of the following terms is the most specific?
   a. bacillus
   b. Bacillus
   c. gram-positive
   d. endospore-forming rods and cocci
   e. anaerobic

7 Which one of the following does not belong with the others?
   a. Enterococcus
   b. Lactobacillus
   c. Staphylococcus
   d. Streptococcus
   e. all are grouped together
8 Which of the following pairs is mismatched?
a. anaerobic endospore-forming gram-positive rods—Clostridium
b. facultatively anaerobic gram-negative rods—Escherichia
c. facultatively anaerobic gram-negative rods—Shigella
d. pleomorphic gram-positive rods—Corynebacterium
e. spirochete—Helicobacter

9 Spirillum is not classified as a spirochete because spirochetes
a. do not cause disease.
b. possess axial filaments.
c. possess flagella.
d. are prokaryotes.
e. none of the above

10 When Legionella was newly discovered, it was classified with the
pseudomonads because
a. it is a pathogen.
b. it is an aerobic gram-negative rod.
c. it is difficult to culture.
d. it is found in water.
e. none of the above

11 Cyanobacteria differ from purple and green phototrophic bacteria because
cyanobacteria
a. produce oxygen during photosynthesis.
b. do not require light.
c. use H2S as an electron donor.
d. have a membrane-enclosed nucleus.
e. all of the above

12 Which of the following is NOT a characteristic of spirochetes?
a. Easily observed with brightfield microscopy
b. Gram-negative
c. Difficult to culture in vitro
d. Helical shape

13 Streptococcus pyogenes belongs to the
a. Proteobacteria
b. Gram-positive bacteria
c. Gram-negative bacteria
d. Spirochetes
14 You have isolated a prokaryotic cell. The first step in identification is
a. Endospore stain
b. Lactose fermentation
c. Gram stain
d. Flagella stain

15 Which of the following are commonly found in the intestines of humans?
a. Gram-positive cocci
b. Facultatively anaerobic gram-negative rods
c. Aerobic helical bacteria
d. Gram-negative aerobic rods and cocci

16 The genus Pseudomonas consists of organisms that are
a. Aerobic
b. Gram-positive rods
c. Gram-positive cocci
d. Nonmotile

17 The phylogenetic relationship in proteobacteria is based on
a. rRNA studies
b. mRNA studies
c. DNA studies
d. tRNA studies

18 Blue-green algae are now called
a. Chlorobi
b. Chloroflexi
c. Campylobacter
d. Cyanobacteria

19 Elementary bodies are found in
a. E. coli
b. Streptococcus
c. Chlamydiae
d. Staphylococcus

20 A primary difference between cyanobacteria and purple sulfur and purple
nonsulfur phototrophic bacteria is
a. Color
b. Cell wall type
c. Electron donor for carbon dioxide reduction
d. Energy source
Microbiology / Active Lecture Questions
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21 Which genus of bacteria is responsible for causing more infections in every area of the human body?
   a. Streptococcus
   b. Neisseria
   c. Staphylococcus
   d. Salmonella

22 In a laboratory, Staphylococcus and Streptococcus are easily differentiated by their
   a. Gram stain reaction
   b. Growth in high salt concentrations
   c. Ability to cause disease
   d. Cell shape

23 Which of the following is NOT gram-positive?
   a. Treponema
   b. Mycobacterium
   c. Bacillus
   d. Corynebacterium

24 Bartonella henselae causes
   a. Ehrlichiosis
   b. Cat-scratch disease
   c. Rocky Mountain spotted fever
   d. Crown gall

25 Which of these organisms is gram-positive?
   a. Pseudomonas
   b. Salmonella
   c. Streptococcus
   d. Rickettsia

26 What should you do if you suspect a patient has tuberculosis?
   a. Check for motility
   b. Perform an acid-fast stain
   c. Perform a Gram stain
   d. Look at a wet mount

27 Which of the following is gram+?
   a. Streptomyces
   b. Bacteriodes
   c. Salmonella
   d. None of these
28 Which of the following is mismatched?
   a. Anamorph-produces asexual spores
   b. Plasmogamy- union of two haploid cells
   c. Karyogamy- fusion of nucleus
   d. Meiosis- cell division resulting in haploid cells
   e. Deuteromycota-phylum of animals