Fundamentals of Microbiology 11th Edition Pommerville Test Bank

Chapter 1 Microbiology: Then and Now

1.1 Multiple-Choice Questions

1) Microorganisms are involved in each of the following processes EXCEPT

A) infection.

B) decomposition of organic material.

C) O2 production.

D) food production.

E) smog production.

Answer: E

Section: 1.1

Blooms Taxonomy: Knowledge

Learning Outcome: 1.1

Global Outcome: 5

2) Each of the following organisms would be considered a microbe EXCEPT

A) yeast.

B) protozoan.

C) bacterium.

D) mushroom.

E) virus.

Answer: D

Section: 1.1

Blooms Taxonomy: Knowledge

Learning Outcome: 1.3

3) The term used to describe a disease-causing microorganism is

A) microbe.

B) bacterium.

C) virus.

D) pathogen.

E) infection.

Answer: D

Section: 1.1

Blooms Taxonomy: Knowledge

Learning Outcome: 1.3

4) Common commercial benefits of microorganisms include synthesis of

A) riboflavin.

B) acetone.

C) insulin.

D) aspirin.

E) riboflavin, acetone and insulin.

Answer: E

Section: 1.1

Blooms Taxonomy: Knowledge

Learning Outcome: 1.1

5) Commercial utilization of microbial products has become increasingly popular due to their environmentally friendly nature. Production of these products which are readily degraded and, thus, non-toxic typically utilizes

A) enzymes.

B) organic acids.

C) organic solvents.

D) soap.

E) alcohol.

Answer: A

Section: 1.4

Blooms Taxonomy: Application

Learning Outcome: 1.1

6) The formal system for classifying and naming organisms was developed by

A) Robert Koch.

B) Ignaz Semmelweis.

C) Aristotle.

D) Carolus Linnaeus.

E) Louis Pasteur.

Answer: D

Section: 1.2

Blooms Taxonomy: Knowledge

Learning Outcome: 1.2

7) In the name *Staphylococcus aureus*, *aureus* is the

A) genus.

B) domain name.

C) species.

D) kingdom.

E) family name.

Answer: C

Section: 1.2

Blooms Taxonomy: Comprehension

Learning Outcome: 1.2

8) A prokaryotic cell may possess each of the following cellular components EXCEPT

A) flagella.

B) a nucleus.

C) ribosomes.

D) a cell wall.

E) a cell membrane.

Answer: B

Section: 1.2

Blooms Taxonomy: Knowledge

ASMcue Outcome: 2.1

Learning Outcome: 1.3

9) Which of the following is NOT associated with viruses?

A) organelles

B) nucleic acid

C) envelope

D) chemical reactions

E) protein coat

Answer: A

Section: 1.2

Blooms Taxonomy: Comprehension

Learning Outcome: 1.3

10) Figure 1.1

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

A) bacillus.

B) spiral.

C) coccus.

D) ovoid.

E) columnar.

Answer: A

Section: 1.2

Blooms Taxonomy: Comprehension

ASMcue Outcome: 2.1

Learning Outcome: 1.3

11) Protozoan motility structures include

A) cilia.

B) flagella.

C) pseudopods.

D) cilia and pseudopods only.

E) cilia, flagella, and pseudopods.

Answer: E

Section: 1.2

Blooms Taxonomy: Knowledge

Learning Outcome: 1.3

12) Viruses are not considered living organisms because they

A) cannot reproduce by themselves.

B) are structurally very simple.

C) can only be visualized using an electron microscope.

D) are typically associated with disease.

E) are ubiquitous in nature.

Answer: A

Section: 1.2

Blooms Taxonomy: Knowledge

ASMcue Outcome: 4.4

Learning Outcome: 1.3

13) The infectious agent that causes AIDS is a

A) virus.

B) bacterium.

C) yeast.

D) protozoan.

E) mold.

Answer: A

Section: 1.2

Blooms Taxonomy: Knowledge

Learning Outcome: 1.3

14) Which of the following is NOT a domain in the three-domain system?

A) animalia

B) archaea

C) bacteria

D) eukarya

Answer: A

Section: 1.2

Blooms Taxonomy: Knowledge

ASMcue Outcome: 1.5

Learning Outcome: 1.4

15) Classification of organisms into three domains is based on

A) the presence of a cell wall.

B) the number of cells in the organism.

C) cellular organization.

D) nutritional requirements.

E) cellular proteins.

Answer: C

Section: 1.2

Blooms Taxonomy: Comprehension

ASMcue Outcome: 1.5

Learning Outcome: 1.4

16) Archaea differ from bacteria in that archaea

A) have diverse cell wall compositions.

B) lack nuclei.

C) use organic compounds for food.

D) reproduce by binary fission.

E) are prokaryotic.

Answer: A

Section: 1.2

Blooms Taxonomy: Comprehension

ASMcue Outcome: 2.3

Learning Outcome: 1.3

17) Who is credited with first observing cells?

A) Robert Hooke

B) Anton van Leeuwenhoek

C) Robert Koch

D) Louis Pasteur

E) Carolus Linnaeus

Answer: A

Section: 1.3

Blooms Taxonomy: Knowledge

ASMcue Outcome: 2.1

Learning Outcome: 1.5

18) Who is credited with first observing microorganisms?

A) Robert Hooke

B) Anton van Leeuwenhoek

C) Robert Koch

D) Louis Pasteur

E) Carolus Linnaeus

Answer: B

Section: 1.3