

***Talaros Foundations in Microbiology 11th edition
Chess Test Bank***

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CH01

ANSWERS ARE LOCATED IN THE SECOND PART OF THIS DOCUMENT

TRUE/FALSE - Write 'T' if the statement is true and 'F' if the statement is false.

1) Members of the same species share many more characteristics compared to those shared by members of the same kingdom.

- ☐ true
- ☐ false

Question Details

Accessibility : Keyboard Navigation

Bloom's : 02. Understand

ASM Topic : Module 01 Evolution

ASM Objective : 01.05 The evolutionary relatedness of organisms is best reflected in phylogenetic tree

Topic : Taxonomy of Microorganisms

Learning Outcome : Explain how the levels of a taxonomic scheme relate to each other. Give the names

Section : 01.06

Gradable : automatic

2) Viruses are *not* classified in any of Whittaker's five kingdoms.

- ☐ true
- ☐ false

Question Details

Bloom's : 01. Remember

Accessibility : Keyboard Navigation

Section : 01.02

ASM Topic : Module 01 Evolution

ASM Objective : 01.05 The evolutionary relatedness of organisms is best reflected in phylogenetic tree

Topic : Taxonomy of Microorganisms

Learning Outcome : Describe the cellular makeup of microorganisms and their size range, and indicate

Gradable : automatic

3) Members of the kingdom Fungi are photosynthetic.

- ☐ true
- ☐ false

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Question Details

Topic : Microbial Roles

Bloom's : 01. Remember

Accessibility : Keyboard Navigation

Section : 01.02

Learning Outcome : Describe the basic characteristics of prokaryotic cells and eukaryotic cells and t

ASM Topic : Module 02 Structure and Function

ASM Objective : 02.04 While microscopic eukaryotes (for example, fungi, protozoa, and algae) carry ou

Gradable : automatic

4) A scientist studying helminths is working with bacteria.

- ☐ true
- ☐ false

Question Details

Bloom's : 01. Remember

Accessibility : Keyboard Navigation

ASM Topic : Module 02 Structure and Function

Section : 01.01

Learning Outcome : Define microbiology and microorganisms, and identify the major organisms included

ASM Objective : 02.04 While microscopic eukaryotes (for example, fungi, protozoa, and algae) carry ou

Topic : Helminths

Gradable : automatic

5) The fossil record has established that prokaryotes existed on Earth for approximately two billion years before eukaryotes evolved.

- ☐ true
- ☐ false

Question Details

Bloom's : 01. Remember

Accessibility : Keyboard Navigation

ASM Topic : Module 01 Evolution

ASM Objective : 01.05 The evolutionary relatedness of organisms is best reflected in phylogenetic tre

Topic : Taxonomy of Microorganisms

Section : 01.07

Learning Outcome : Discuss the fundamentals of evolution, evidence used to verify evolutionary trends

Gradable : automatic

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6) It has been over 25 years since a new infectious disease has emerged in the world.

- ☐ true
- ☐ false

Question Details

ASM Topic : Module 05 Systems

ASM Objective : 05.04 Microorganisms, cellular and viral, can interact with both human and nonhuman h

Bloom's : 01. Remember

Section : 01.04

Accessibility : Keyboard Navigation

Topic : Epidemiology

Learning Outcome : Define what is meant by emerging and reemerging diseases.

Gradable : automatic

7) *The term sterile means free of all life-forms.*

- ☐ true
- ☐ false

Question Details

Topic : Microbial Roles

Bloom's : 01. Remember

Accessibility : Keyboard Navigation

Section : 01.01

Learning Outcome : Define microbiology and microorganisms, and identify the major organisms included

ASM Topic : Module 03 Metabolic Pathways

ASM Objective : 03.04 The growth of microorganisms can be controlled by physical, chemical, mechanical

Gradable : automatic

8) All microorganisms are parasites.

- ☐ true
- ☐ false

Question Details

Learning Outcome : Review the roles of microorganisms as parasites and pathogens that cause infection

ASM Topic : Module 05 Systems

ASM Objective : 05.04 Microorganisms, cellular and viral, can interact with both human and nonhuman h

Topic : Microbial Roles

Section : 01.04

Accessibility : Keyboard Navigation

Bloom's : 02. Understand

Gradable : automatic

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9) During a scientific experiment, the control group is used to directly test or measure the consequences of a variable in the study.

- ☐ true
- ☐ false

Question Details

Accessibility : Keyboard Navigation

Bloom's : 03. Apply

Topic : History of Microbiology

Section : 01.05

Learning Outcome : Explain the main features of the scientific method, and differentiate between indu

ASM Topic : Module 07 Scientific Thinking

ASM Objective : 07.01a Ability to apply the process of science: Demonstrate an ability to formulate h

Gradable : automatic

10) The scientific method involves formulating a tentative explanation, called the hypothesis, to account for what has been observed or measured.

- ☐ true
- ☐ false

Question Details

Accessibility : Keyboard Navigation

Bloom's : 02. Understand

Topic : History of Microbiology

Section : 01.05

Learning Outcome : Explain the main features of the scientific method, and differentiate between indu

ASM Topic : Module 07 Scientific Thinking

ASM Objective : 07.01a Ability to apply the process of science: Demonstrate an ability to formulate h

Gradable : automatic

11) Once an organism is assigned to a particular taxonomic hierarchy, it is permanent and cannot be revised.

- ☐ true
- ☐ false

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Question Details

Accessibility : Keyboard Navigation

Bloom's : 02. Understand

ASM Topic : Module 01 Evolution

ASM Objective : 01.05 The evolutionary relatedness of organisms is best reflected in phylogenetic tree

Topic : Taxonomy of Microorganisms

Section : 01.07

Learning Outcome : Explain the bases for classification, taxonomy, and nomenclature.

Learning Outcome : Discuss the fundamentals of evolution, evidence used to verify evolutionary trends

Gradable : automatic

12) When the results of an experiment support a hypothesis, the hypothesis can now be considered a theory.

- ☐ true
- ☐ false

Question Details

Accessibility : Keyboard Navigation

Bloom's : 02. Understand

Topic : History of Microbiology

Section : 01.05

Learning Outcome : Explain the main features of the scientific method, and differentiate between induction and deduction

ASM Topic : Module 07 Scientific Thinking

ASM Objective : 07.01a Ability to apply the process of science: Demonstrate an ability to formulate hypotheses

Gradable : automatic

13) The names of the three proposed domains are: Bacteria, Protista, Eukarya.

- ☐ true
- ☐ false

Question Details

Bloom's : 01. Remember

Accessibility : Keyboard Navigation

ASM Topic : Module 01 Evolution

ASM Objective : 01.05 The evolutionary relatedness of organisms is best reflected in phylogenetic tree

Topic : Taxonomy of Microorganisms

Section : 01.07

Learning Outcome : Explain the concepts behind the organization of the two main trees of life, and in

Gradable : automatic

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14) One distinguishing characteristic of archaea is that they live in extreme environments.

- ☐ true
- ☐ false

Question Details

Bloom's : 01. Remember

Accessibility : Keyboard Navigation

Learning Outcome : Define microbiology and microorganisms, and identify the major organisms included

Topic : Taxonomy of Microorganisms

ASM Topic : Module 03 Metabolic Pathways

Learning Outcome : Recall the order of taxa and the system of notation used in creating scientific names

Section : 01.07

ASM Objective : 03.01 Bacteria and Archaea exhibit extensive, and often unique, metabolic diversity (

Gradable : automatic

15) Some microorganisms can photosynthesize, but their overall contribution to Earth's atmospheric oxygen is very small in comparison to plant photosynthesis.

- ☐ true
- ☐ false

Question Details

Topic : Microbial Roles

Accessibility : Keyboard Navigation

Learning Outcome : State several ways that microbes are involved in the earth's ecosystems.

Section : 01.02

Bloom's : 02. Understand

ASM Topic : Module 06 Impact of Microorganisms

ASM Objective : 06.01 Microbes are essential for life as we know it and the processes that support life

Activity Type : New

Gradable : automatic

16) Any microorganism on or in the human body is considered a pathogen.

- ☐ true
- ☐ false

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Question Details

Learning Outcome : Review the roles of microorganisms as parasites and pathogens that cause infection
ASM Topic : Module 05 Systems
ASM Objective : 05.04 Microorganisms, cellular and viral, can interact with both human and nonhuman h
Topic : Microbial Roles
Section : 01.04
Accessibility : Keyboard Navigation
Bloom's : 02. Understand
Activity Type : New
Gradable : automatic

17) Theories are supported by more evidence than hypotheses.

- ☐ true
- ☐ false

Question Details

Bloom's : 01. Remember
Accessibility : Keyboard Navigation
Topic : History of Microbiology
Section : 01.05
Learning Outcome : Explain the main features of the scientific method, and differentiate between indu
ASM Topic : Module 07 Scientific Thinking
ASM Objective : 07.01a Ability to apply the process of science: Demonstrate an ability to formulate h
Activity Type : New
Gradable : automatic

MULTIPLE CHOICE - Choose the one alternative that best completes the statement or answers the question.

18) Disease-causing microorganisms are called

- A) decomposers.
- B) prokaryotes.
- C) pathogens.
- D) eukaryotes.
- E) fermenters.

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Question Details

Learning Outcome : Review the roles of microorganisms as parasites and pathogens that cause infection

ASM Topic : Module 05 Systems

ASM Objective : 05.04 Microorganisms, cellular and viral, can interact with both human and nonhuman h

Topic : Microbial Roles

Bloom's : 01. Remember

Section : 01.04

Accessibility : Keyboard Navigation

Gradable : automatic

19) The microorganisms that recycle nutrients by breaking down dead matter and wastes are called

- A) decomposers.
- B) prokaryotes.
- C) pathogens.
- D) eukaryotes.
- E) fermenters.

Question Details

ASM Topic : Module 05 Systems

Topic : Microbial Roles

Bloom's : 01. Remember

Accessibility : Keyboard Navigation

Learning Outcome : State several ways that microbes are involved in the earth's ecosystems.

ASM Objective : 05.03 Microorganisms and their environment interact with and modify each other.

Section : 01.02

Gradable : automatic

20) The microorganisms that do *not* have a nucleus in their cells are called

- A) decomposers.
- B) prokaryotes.
- C) pathogens.
- D) eukaryotes.
- E) fermenters.

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CH01

Question Details

Bloom's : 01. Remember

Accessibility : Keyboard Navigation

Section : 01.02

Learning Outcome : Describe the basic characteristics of prokaryotic cells and eukaryotic cells and t

ASM Topic : Module 02 Structure and Function

ASM Objective : 02.01 The structure and function of microorganisms have been revealed by the use of m

Topic : Cellular Organization

Gradable : automatic

21) When humans manipulate the genes of microorganisms, the process is called

- A) bioremediation.
- B) geneticengineering.
- C) epidemiology.
- D) immunology.
- E) taxonomy.

Question Details

Accessibility : Keyboard Navigation

Learning Outcome : Name and define the primary areas included in microbiological studies.

ASM Topic : Module 04 Information Flow

ASM Objective : 04.05 Cell genomes can be manipulated to alter cell function.

Topic : Basics of Genetic Engineering

Bloom's : 02. Understand

Section : 01.01

Gradable : automatic

22) Which of the following are *not* considered microorganisms?

- A) Mosquitoes
- B) Protozoa
- C) Bacteria
- D) Viruses
- E) Fungi

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Question Details

Accessibility : Keyboard Navigation

Bloom's : 02. Understand

Section : 01.01

Learning Outcome : Define microbiology and microorganisms, and identify the major organisms included

ASM Topic : Module 01 Evolution

ASM Objective : 01.05 The evolutionary relatedness of organisms is best reflected in phylogenetic tree

Topic : Taxonomy of Microorganisms

Gradable : automatic

23) All microorganisms are best defined as organisms that

- A) cause human disease.
- B) lack a cell nucleus.
- C) are infectious particles.
- D) are too small to be seen with the unaided eye.
- E) can only be found growing in laboratories.

Question Details

Accessibility : Keyboard Navigation

ASM Topic : Module 02 Structure and Function

ASM Objective : 02.01 The structure and function of microorganisms have been revealed by the use of microscopy

Bloom's : 02. Understand

Section : 01.01

Learning Outcome : Define microbiology and microorganisms, and identify the major organisms included

Topic : Taxonomy of Microorganisms

Gradable : automatic

24) Which activity is an example of biotechnology?

- A) Bacteria in the soil secrete an antibiotic to kill competitors.
- B) A microbiologist uses a microscope to study bacteria.
- C) Humans use yeast to make beer and wine.
- D) *Mycobacterium tuberculosis* causes tuberculosis in the lungs.
- E) Public health officials monitor diseases in a community.

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Question Details

Accessibility : Keyboard Navigation

Learning Outcome : Discuss the ways microorganisms can be used to create solutions for environmental

ASM Topic : Module 06 Impact of Microorganisms

ASM Objective : 06.03 Humans utilize and harness microorganisms and their products.

Topic : Food Microbiology

Bloom's : 03. Apply

Section : 01.03

Gradable : automatic

25) Which of the following is a unique characteristic of viruses that distinguishes them from the other major groups of microorganisms?

- A) Viruses cause human disease.
- B) Viruses are composed of cells that lack nuclei.
- C) Viruses cannot be seen without an electron microscope.
- D) Viruses contain genetic material.
- E) Viruses lack ribosomes.

Question Details

Accessibility : Keyboard Navigation

Section : 01.02

ASM Topic : Module 02 Structure and Function

Bloom's : 02. Understand

Learning Outcome : Describe the cellular makeup of microorganisms and their size range, and indicate

ASM Objective : 02.05 The replication cycles of viruses (lytic and lysogenic) differ among viruses and

Topic : General Viral Properties

Topic : Viral structure

Gradable : automatic

26) Who was the Dutch merchant that made and used quality magnifying lenses to see and record microorganisms?

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- A) Francesco Redi
- B) Antonie van Leeuwenhoek
- C) Louis Pasteur
- D) Joseph Lister
- E) Robert Koch

Question Details

Bloom's : 01. Remember

Accessibility : Keyboard Navigation

ASM Topic : Module 02 Structure and Function

ASM Objective : 02.01 The structure and function of microorganisms have been revealed by the use of m

Learning Outcome : Outline the major events in the history of microbiology, including the major contri

Topic : History of Microbiology

Section : 01.05

Gradable : automatic

27) Pasteur used swan-neck flasks in his experiments to prove that

- A) air had "vitalforces" capable of spontaneous generation.
- B) microbialfermentation could be used to make wine.
- C) dust in air was asource of living microorganisms.
- D) microorganismscould cause disease.
- E) microorganisms could be grown inlaboratory infusions.

Question Details

ASM Topic : Module 05 Systems

Accessibility : Keyboard Navigation

Bloom's : 02. Understand

Learning Outcome : Outline the major events in the history of microbiology, including the major contri

Topic : History of Microbiology

Section : 01.05

ASM Objective : 05.01 Microorganisms are ubiquitous and live in diverse and dynamic ecosystems.

Gradable : automatic

28) Which of the following is *not* a process in the scientific method?

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CH01

- A) Belief in a preconceived idea
- B) Formulation of a hypothesis
- C) Systematic observation
- D) Laboratory experimentation
- E) Development of a theory

Question Details

Accessibility : Keyboard Navigation

Bloom's : 02. Understand

Topic : History of Microbiology

Section : 01.05

Learning Outcome : Explain the main features of the scientific method, and differentiate between indu

ASM Topic : Module 07 Scientific Thinking

ASM Objective : 07.01a Ability to apply the process of science: Demonstrate an ability to formulate h

Gradable : automatic

29) Spontaneous generation is the idea that

- A) germs cause infectious diseases.
- B) microbes are diverse and ubiquitous.
- C) microbes placed in an infusion can grow in it.
- D) aseptic techniques reduce microbes in medical settings.
- E) living things arise from nonliving matter.

Question Details

Accessibility : Keyboard Navigation

Bloom's : 02. Understand

Learning Outcome : Outline the major events in the history of microbiology, including the major contri

Topic : History of Microbiology

Section : 01.05

ASM Topic : Module 03 Metabolic Pathways

ASM Objective : 03.04 The growth of microorganisms can be controlled by physical, chemical, mechanical

Gradable : automatic

30) Koch's postulates are criteria used to establish that

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- A) microbes are found on dust particles.
- B) a specific microbe is the cause of a specific disease.
- C) life-forms can only arise from preexisting life-forms.
- D) a specific microbe should be classified in a specific kingdom.
- E) microbes can be used to clean up toxic spills.

Question Details

ASM Topic : Module 05 Systems

ASM Objective : 05.04 Microorganisms, cellular and viral, can interact with both human and nonhuman h

Accessibility : Keyboard Navigation

Bloom's : 02. Understand

Learning Outcome : Outline the major events in the history of microbiology, including the major contri

Topic : History of Microbiology

Section : 01.05

Gradable : automatic

31) Which of the following is a taxon that contains all the other taxa listed?

- A) Species
- B) Phylum
- C) Kingdom
- D) Genus
- E) Family

Question Details

Accessibility : Keyboard Navigation

ASM Topic : Module 01 Evolution

ASM Objective : 01.05 The evolutionary relatedness of organisms is best reflected in phylogenetic tre

Topic : Taxonomy of Microorganisms

Bloom's : 03. Apply

Learning Outcome : Explain how the levels of a taxonomic scheme relate to each other. Give the names

Section : 01.06

Gradable : automatic

32) Which of the following is a scientific name?

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- A) Bacteria
- B) Protista
- C) Species
- D) *Bacillussubtilis*
- E) Bacilli

Question Details

Accessibility : Keyboard Navigation

Bloom's : 02. Understand

ASM Topic : Module 01 Evolution

ASM Objective : 01.05 The evolutionary relatedness of organisms is best reflected in phylogenetic tree

Topic : Taxonomy of Microorganisms

Section : 01.06

Learning Outcome : Recall the order of taxa and the system of notation used in creating scientific names

Learning Outcome : Describe the goals of nomenclature and how the binomial system is structured. Know

Section : 01.07

Gradable : automatic

33) Taxonomy does *not* involve

- A) nomenclature.
- B) classification.
- C) taxa.
- D) identification.
- E) Koch's postulates.

Question Details

Accessibility : Keyboard Navigation

Bloom's : 02. Understand

ASM Topic : Module 01 Evolution

ASM Objective : 01.05 The evolutionary relatedness of organisms is best reflected in phylogenetic tree

Topic : Taxonomy of Microorganisms

Section : 01.06

Learning Outcome : Define taxonomy and its supporting terms classification, nomenclature, and identification

Gradable : automatic

34) The smallest taxon is

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CH01

- A) genus.
- B) species.
- C) kingdom.
- D) family.
- E) phylum.

Question Details

Accessibility : Keyboard Navigation

Bloom's : 02. Understand

ASM Topic : Module 01 Evolution

ASM Objective : 01.05 The evolutionary relatedness of organisms is best reflected in phylogenetic tree

Topic : Taxonomy of Microorganisms

Learning Outcome : Explain how the levels of a taxonomic scheme relate to each other. Give the names

Section : 01.06

Learning Outcome : Recall the order of taxa and the system of notation used in creating scientific names

Section : 01.07

Gradable : automatic

35) The study of evolutionary relationships among organisms is called

- A) biotechnology.
- B) genetics.
- C) recombinant DNA.
- D) phylogeny.
- E) taxonomy.

Question Details

Bloom's : 01. Remember

Accessibility : Keyboard Navigation

ASM Topic : Module 01 Evolution

ASM Objective : 01.05 The evolutionary relatedness of organisms is best reflected in phylogenetic tree

Topic : Taxonomy of Microorganisms

Section : 01.06

Learning Outcome : Define taxonomy and its supporting terms classification, nomenclature, and identification

Gradable : automatic

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CH01

36) A scientist studying similarities in the sequence of nucleotides in rRNA of two bacterial species is working on

- A) determining evolutionary relatedness.
- B) bioremediation.
- C) recombinant DNA.
- D) nomenclature.
- E) determining if that species is the cause of a new disease.

Question Details

Accessibility : Keyboard Navigation

ASM Topic : Module 01 Evolution

ASM Objective : 01.05 The evolutionary relatedness of organisms is best reflected in phylogenetic tree

Topic : Taxonomy of Microorganisms

Bloom's : 03. Apply

Section : 01.07

Learning Outcome : Explain the bases for classification, taxonomy, and nomenclature.

Gradable : automatic

37) A scientist discovers a new microbial species. It is a single-celled eukaryote without cell walls. In which kingdom will it likely be classified?

- A) Monera
- B) Protista
- C) Fungi
- D) Animalia
- E) Plantae

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CH01

Question Details

Accessibility : Keyboard Navigation

ASM Topic : Module 02 Structure and Function

Topic : Taxonomy of Microorganisms

Bloom's : 03. Apply

Section : 01.07

Learning Outcome : Explain the bases for classification, taxonomy, and nomenclature.

ASM Objective : 02.04 While microscopic eukaryotes (for example, fungi, protozoa, and algae) carry ou

Gradable : automatic

38) A scientist collecting grass clippings to find the source of an outbreak of tularemia is an example of working in the field of

- A) foodmicrobiology.
- B) epidemiology.
- C) agriculturalmicrobiology.
- D) geneticengineering.
- E) biotechnology.

Question Details

ASM Topic : Module 05 Systems

ASM Objective : 05.04 Microorganisms, cellular and viral, can interact with both human and nonhuman h

Accessibility : Keyboard Navigation

Learning Outcome : Name and define the primary areas included in microbiological studies.

Section : 01.01

Bloom's : 03. Apply

Topic : Epidemiology

Gradable : automatic

39) Helminths are

- A) bacteria.
- B) protozoa.
- C) molds.
- D) parasiticworms.
- E) infectious particles.

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Question Details

ASM Topic : Module 05 Systems

ASM Objective : 05.04 Microorganisms, cellular and viral, can interact with both human and nonhuman h

Bloom's : 01. Remember

Accessibility : Keyboard Navigation

Section : 01.01

Learning Outcome : Define microbiology and microorganisms, and identify the major organisms included

Topic : Helminths

Gradable : automatic

40) All of the following pertain to photosynthesis, *except*

- A) it occurs only in members of the kingdom Plantae .
- B) carbon dioxide is converted to organic material.
- C) it contributes to the oxygen content in the atmosphere.
- D) it is fueled by light.
- E) it is important to each ecosystem's flow of energy and food.

Question Details

Topic : Microbial Roles

Accessibility : Keyboard Navigation

Learning Outcome : State several ways that microbes are involved in the earth's ecosystems.

Section : 01.02

Bloom's : 02. Understand

ASM Topic : Module 03 Metabolic Pathways

ASM Objective : 03.02 The interactions of microorganisms among themselves and with their environment

Gradable : automatic

41) Organisms called parasites are

- A) always classified in the kingdom Monera.
- B) always harmful to their host.
- C) the decomposers in ecosystems.
- D) always viruses.
- E) free-living.

Talaros Foundations in Microbiology 11th Edition by Chess

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Question Details

Learning Outcome : Review the roles of microorganisms as parasites and pathogens that cause infection

ASM Topic : Module 05 Systems

ASM Objective : 05.04 Microorganisms, cellular and viral, can interact with both human and nonhuman h

Topic : Microbial Roles

Section : 01.04

Accessibility : Keyboard Navigation

Bloom's : 02. Understand

Gradable : automatic

42) Who was the surgeon that advocated using disinfectants on hands and in the air prior to surgery?

- A) Joseph Lister
- B) Ignaz Semmelweis
- C) Robert Koch
- D) Louis Pasteur
- E) Antonie van Leeuwenhoek

Question Details

Bloom's : 01. Remember

Accessibility : Keyboard Navigation

Learning Outcome : Outline the major events in the history of microbiology, including the major contri

Topic : History of Microbiology

Section : 01.05

ASM Topic : Module 03 Metabolic Pathways

ASM Objective : 03.04 The growth of microorganisms can be controlled by physical, chemical, mechanica

Gradable : automatic

43) Which scientist showed that anthrax was caused by the bacterium *Bacillus anthracis*?

- A) Joseph Lister
- B) Ignaz Semmelweis
- C) Robert Koch
- D) Louis Pasteur
- E) Antonie van Leeuwenhoek

Talaros Foundations in Microbiology 11th Edition by Chess

CH01

Question Details

ASM Topic : Module 05 Systems

ASM Objective : 05.04 Microorganisms, cellular and viral, can interact with both human and nonhuman h

Bloom's : 01. Remember

Accessibility : Keyboard Navigation

Learning Outcome : Outline the major events in the history of microbiology, including the major contri

Topic : History of Microbiology

Section : 01.05

Gradable : automatic

44) Which of the following lists the correct descending taxonomic hierarchy (left to right)?

- A) Family, Order, Class
- B) Family, Genus, Species
- C) Genus, Species, Family
- D) Class, Phylum, Order
- E) Kingdom, Domain, Phylum

Question Details

Bloom's : 01. Remember

Accessibility : Keyboard Navigation

ASM Topic : Module 01 Evolution

ASM Objective : 01.05 The evolutionary relatedness of organisms is best reflected in phylogenetic tre

Topic : Taxonomy of Microorganisms

Learning Outcome : Explain how the levels of a taxonomic scheme relate to each other. Give the names

Section : 01.06

Gradable : automatic

45) When assigning a scientific name to an organism,

- A) the species name is capitalized.
- B) the species name is placed first.
- C) the species name can be abbreviated.
- D) both genus and species names are capitalized.
- E) both genus and species names are italicized or underlined.

Talaros Foundations in Microbiology 11th Edition by Chess

CH01

Question Details

Bloom's : 01. Remember

Accessibility : Keyboard Navigation

Topic : Taxonomy of Microorganisms

ASM Topic : Module 07 Scientific Thinking

Section : 01.06

Learning Outcome : Describe the goals of nomenclature and how the binomial system is structured. Know

ASM Objective : 07.03a Ability to communicate and collaborate with other disciplines: Effectively com

Gradable : automatic

46) In Whittaker's system, the protozoa and algae are classified in the kingdom

- A) Monera.
- B) Protista.
- C) Mycetae.
- D) Plantae.
- E) Animalia.

Question Details

Bloom's : 01. Remember

Accessibility : Keyboard Navigation

ASM Topic : Module 01 Evolution

ASM Objective : 01.05 The evolutionary relatedness of organisms is best reflected in phylogenetic tre

Topic : Taxonomy of Microorganisms

Section : 01.07

Learning Outcome : Explain the concepts behind the organization of the two main trees of life, and in

Gradable : automatic

47) The scientist(s) that proposed assigning organisms to one of three domains is/are

- A) Robert Koch and Louis Pasteur.
- B) Antonie van Leeuwenhoek.
- C) Carl Woese and George Fox.
- D) Robert Whittaker.
- E) Francesco Redi.

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CH01

Question Details

Bloom's : 01. Remember

Accessibility : Keyboard Navigation

ASM Topic : Module 01 Evolution

ASM Objective : 01.05 The evolutionary relatedness of organisms is best reflected in phylogenetic tree

Topic : Taxonomy of Microorganisms

Section : 01.07

Learning Outcome : Explain the concepts behind the organization of the two main trees of life, and in

Gradable : automatic

48) Which kingdom does *not* contain any eukaryotes?

- A) Monera
- B) Protista
- C) Mycetozoa
- D) Plantae
- E) Animalia

Question Details

Accessibility : Keyboard Navigation

Bloom's : 02. Understand

ASM Topic : Module 01 Evolution

ASM Objective : 01.05 The evolutionary relatedness of organisms is best reflected in phylogenetic tree

Topic : Taxonomy of Microorganisms

Section : 01.07

Learning Outcome : Explain the concepts behind the organization of the two main trees of life, and in

Gradable : automatic

49) Which of the following are the main decomposers of the Earth?

- A) Bacteria and fungi
- B) Bacteria and viruses
- C) Algae and viruses
- D) Protists and fungi
- E) All organisms are decomposers.

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Question Details

ASM Topic : Module 05 Systems

Topic : Microbial Roles

Accessibility : Keyboard Navigation

Learning Outcome : State several ways that microbes are involved in the earth's ecosystems.

ASM Objective : 05.03 Microorganisms and their environment interact with and modify each other.

Section : 01.02

Bloom's : 02. Understand

Gradable : automatic

50) The most common infectious cause of death worldwide is

- A) HIV/AIDS.
- B) stroke.
- C) heart disease.
- D) cancer.
- E) malaria.

Question Details

Learning Outcome : Review the roles of microorganisms as parasites and pathogens that cause infection

ASM Topic : Module 05 Systems

ASM Objective : 05.04 Microorganisms, cellular and viral, can interact with both human and nonhuman h

Topic : Microbial Roles

Bloom's : 01. Remember

Section : 01.04

Accessibility : Keyboard Navigation

Gradable : automatic

51) Which of the following diseases is transmitted by mosquitoes?

- A) Diarrheal diseases
- B) Tuberculosis
- C) Malaria
- D) Septicemia
- E) Influenza

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CH01

Question Details

Learning Outcome : Review the roles of microorganisms as parasites and pathogens that cause infection
ASM Topic : Module 05 Systems
ASM Objective : 05.04 Microorganisms, cellular and viral, can interact with both human and nonhuman h
Topic : Microbial Roles
Bloom's : 01. Remember
Section : 01.04
Accessibility : Keyboard Navigation
Gradable : automatic

52) All of the following are correct about prokaryotes, *except*

- A) they are smaller than eukaryotes.
- B) they lack a nucleus.
- C) they are less complex than eukaryotes.
- D) they have organelles.
- E) they are found nearly everywhere.

Question Details

Accessibility : Keyboard Navigation
Section : 01.02
Learning Outcome : Describe the basic characteristics of prokaryotic cells and eukaryotic cells and t
ASM Topic : Module 02 Structure and Function
Topic : Cellular Organization
Bloom's : 02. Understand
ASM Objective : 02.02 Bacteria have unique cell structures that can be targets for antibiotics, immun
Gradable : automatic

53) All of the following contribute to the rise of emerging diseases, *except*

- A) the decrease in drug-resistant bacteria.
- B) human encroachment on wild habitats.
- C) changes in agricultural practices.
- D) human populations are more mobile.

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CH01

Question Details

ASM Topic : Module 05 Systems

ASM Objective : 05.04 Microorganisms, cellular and viral, can interact with both human and nonhuman h

Topic : Microbial Roles

Section : 01.04

Accessibility : Keyboard Navigation

Bloom's : 02. Understand

Learning Outcome : Define what is meant by emerging and reemerging diseases.

Gradable : automatic

54) Which scientist discovered heat-resistant bacterial spores?

- A) Joseph Lister
- B) IgnazSemmelweis
- C) Robert Koch
- D) Ferdinand Cohn
- E) Antonie van Leeuwenhoek

Question Details

Bloom's : 01. Remember

Accessibility : Keyboard Navigation

ASM Topic : Module 02 Structure and Function

ASM Objective : 02.01 The structure and function of microorganisms have been revealed by the use of m

Learning Outcome : Outline the major events in the history of microbiology, including the major contri

Topic : History of Microbiology

Section : 01.05

Gradable : automatic

55) Which of the following is the correct way to write the scientific name of this bacterium?

- A) Staph Aureus
- B) StaphylococcusAureus
- C) *Staphylococcusaureus*
- D) StaphylococcusAureus
- E) S. Aureus

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CH01

Question Details

Bloom's : 01. Remember

Accessibility : Keyboard Navigation

Topic : Taxonomy of Microorganisms

ASM Topic : Module 07 Scientific Thinking

Section : 01.06

Learning Outcome : Describe the goals of nomenclature and how the binomial system is structured. Know

ASM Objective : 07.03a Ability to communicate and collaborate with other disciplines: Effectively com

Gradable : automatic

56) Where are you most likely to find prokaryotes belonging to the domain Archaea?

- A) A human's large intestine
- B) A hot spring
- C) A pond
- D) A sewage treatment plant
- E) A beer production facility

Question Details

ASM Topic : Module 05 Systems

Topic : Microbial Roles

Accessibility : Keyboard Navigation

Bloom's : 02. Understand

Topic : Taxonomy of Microorganisms

ASM Objective : 05.01 Microorganisms are ubiquitous and live in diverse and dynamic ecosystems.

Section : 01.07

Learning Outcome : Explain the concepts behind the organization of the two main trees of life, and in

Gradable : automatic

57) When microbes are introduced into the environment to restore stability, the process is called

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CH01

- A) bioremediation.
- B) geneticengineering.
- C) epidemiology.
- D) immunology.
- E) taxonomy.

Question Details

Topic : Microbial Roles

Bloom's : 01. Remember

Accessibility : Keyboard Navigation

Learning Outcome : Discuss the ways microorganisms can be used to create solutions for environmental

ASM Topic : Module 06 Impact of Microorganisms

Section : 01.03

ASM Objective : 06.01 Microbes are essential for life as we know it and the processes that support li

Gradable : automatic

58) In which of the following conditions is/are microbial infection often implicated as a cause?

- A) Gastric ulcers
- B) Female infertility
- C) Coronary artery disease
- D) Cervical cancer
- E) All of the choices are correct.

Question Details

Learning Outcome : Review the roles of microorganisms as parasites and pathogens that cause infection

ASM Topic : Module 05 Systems

ASM Objective : 05.04 Microorganisms, cellular and viral, can interact with both human and nonhuman h

Topic : Microbial Roles

Section : 01.04

Accessibility : Keyboard Navigation

Bloom's : 02. Understand

Gradable : automatic

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59) Cyanide is a chemical used to dissolve gold and is harmful to the environment and organisms living there. A couple of biochemists came up with the idea of using the bacteria in the genus *Pseudomonas* to break down the cyanide used by a gold mining company. Which term refers to this use of bacteria?

- A) Bioremediation
- B) Immunoextraction
- C) Decomposition
- D) Bioextraction
- E) Biosynthesis

Question Details

Topic : Microbial Roles

Accessibility : Keyboard Navigation

Learning Outcome : Discuss the ways microorganisms can be used to create solutions for environmental

ASM Topic : Module 06 Impact of Microorganisms

ASM Objective : 06.03 Humans utilize and harness microorganisms and their products.

Bloom's : 03. Apply

Section : 01.03

Gradable : automatic

60) Which of the following branches of Microbiology is utilized in diagnosing or treating someone who has broken out in hives and is experiencing respiratory distress due to an exposure to a microbial toxin?

- A) Agricultural Microbiology
- B) Epidemiology
- C) Biotechnology
- D) Immunology
- E) Industrial Microbiology

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Question Details

ASM Topic : Module 05 Systems

ASM Objective : 05.04 Microorganisms, cellular and viral, can interact with both human and nonhuman h

Accessibility : Keyboard Navigation

Learning Outcome : Name and define the primary areas included in microbiological studies.

Bloom's : 02. Understand

Section : 01.01

Topic : Hypersensitivities

Gradable : automatic

61) The nurse in an emergency department is reviewing discharge instructions with a client. The client asks for clarification of a zoonosis, in regards to the type of illness. What is the *best* response by the nurse?

- A) A zoonosis refers to any viral disease.
- B) A zoonosis is any disease which can be successfully treated with antibiotics.
- C) A zoonosis is a disease typically found in animals, but which infects humans.
- D) A zoonosis is a disease caused by a eukaryotic parasite.

Question Details

Learning Outcome : Review the roles of microorganisms as parasites and pathogens that cause infection

ASM Topic : Module 05 Systems

ASM Objective : 05.04 Microorganisms, cellular and viral, can interact with both human and nonhuman h

Topic : Microbial Roles

Section : 01.04

Accessibility : Keyboard Navigation

Bloom's : 02. Understand

Activity Type : New

Gradable : automatic

62) A scientist that constructs a hypothesis and then tests its validity by outlining predicted events of the hypothesis followed by experimenting to test for those events is using the _____ approach.

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- A) inductive
- B) deductive
- C) instructive
- D) trial-and-error

Question Details

Accessibility : Keyboard Navigation

Bloom's : 02. Understand

Topic : History of Microbiology

Section : 01.05

Learning Outcome : Explain the main features of the scientific method, and differentiate between indu

ASM Topic : Module 07 Scientific Thinking

ASM Objective : 07.01a Ability to apply the process of science: Demonstrate an ability to formulate h

Gradable : automatic

63) Recently Zika virus has been in the news, with many cases in Central and South America and increasing numbers of cases in the southern United States. Five years ago this virus was essentially unheard of in these areas. This is an example of

- A) an endemic virus.
- B) an emerging infectious disease.
- C) genetic recombination.
- D) a pandemic.

Question Details

ASM Objective : 05.04 Microorganisms, cellular and viral, can interact with both human and nonhuman h

Section : 01.04

Accessibility : Keyboard Navigation

Bloom's : 03. Apply

Topic : Epidemiology

Learning Outcome : Define what is meant by emerging and reemerging diseases.

Gradable : automatic

64) Numerous cases of microcephaly have been observed in the newborn babies of women who were infected with Zika virus during pregnancy. This led to the proposed hypothesis that Zika virus was causing the birth defects. This is an example of

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- A) hypothesis testing.
- B) deductive reasoning.
- C) inductive reasoning.
- D) theory development.

Question Details

Accessibility : Keyboard Navigation

Bloom's : 03. Apply

Section : 01.05

Learning Outcome : Explain the main features of the scientific method, and differentiate between indu

ASM Topic : Module 07 Scientific Thinking

ASM Objective : 07.01b Ability to apply the process of science: Analyze and interpret results from a

Gradable : automatic

65) You identify a new species of microorganism in an undersea thermal vent. The microbe is a single cell organism that lacks a nucleus. Which Domain would you classify your new species as belonging to?

- A) Domain Archaea
- B) Domain Bacteria
- C) Domain Eukarya
- D) None of the answers are correct.

Question Details

Accessibility : Keyboard Navigation

ASM Topic : Module 01 Evolution

ASM Objective : 01.05 The evolutionary relatedness of organisms is best reflected in phylogenetic tre

Topic : Taxonomy of Microorganisms

Bloom's : 03. Apply

Section : 01.07

Learning Outcome : Explain the concepts behind the organization of the two main trees of life, and in

Activity Type : New

Gradable : automatic

66) A scientist makes a hypothesis that increased susceptibility to mosquito bites has a genetic basis. What is *not* an appropriate next step for her?

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CH01

- A) She should present the data that promotes this hypothesis to get feedback from other scientists.
- B) She should repeat the experiments that led her to this hypothesis.
- C) She should propose a theory based on the results from her preliminary experiment.
- D) She should design a set of experiments that will test her hypothesis in a different way.

Question Details

Accessibility : Keyboard Navigation

Bloom's : 02. Understand

Topic : History of Microbiology

Section : 01.05

Learning Outcome : Explain the main features of the scientific method, and differentiate between indu

ASM Topic : Module 07 Scientific Thinking

ASM Objective : 07.01a Ability to apply the process of science: Demonstrate an ability to formulate h

Activity Type : New

Gradable : automatic

67) Which of the following is the *least* useful information to determine the evolutionary relatedness of two species?

- A) The environments they live in.
- B) Their DNA sequences.
- C) The morphological features that they have in common.
- D) All of the answers are important for determining evolutionary relatedness.

Question Details

Accessibility : Keyboard Navigation

ASM Topic : Module 01 Evolution

ASM Objective : 01.05 The evolutionary relatedness of organisms is best reflected in phylogenetic tre

Topic : Taxonomy of Microorganisms

Bloom's : 03. Apply

Section : 01.07

Activity Type : New

Learning Outcome : Discuss the fundamentals of evolution, evidence used to verify evolutionary trends

Gradable : automatic

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CH01

FILL IN THE BLANK. Write the word or phrase that best completes each statement or answers the question.

68) The scientific field called _____ is involved in the identification, classification, and naming of organisms.

Question Details

Bloom's : 01. Remember

Accessibility : Keyboard Navigation

ASM Topic : Module 01 Evolution

ASM Objective : 01.05 The evolutionary relatedness of organisms is best reflected in phylogenetic tree

Topic : Taxonomy of Microorganisms

Section : 01.06

Learning Outcome : Define taxonomy and its supporting terms classification, nomenclature, and identification

Gradable : automatic

69) The area of biology that states that living things undergo gradual structural and functional changes over long periods of time is referred to as _____.

Question Details

Bloom's : 01. Remember

Accessibility : Keyboard Navigation

ASM Topic : Module 01 Evolution

ASM Objective : 01.05 The evolutionary relatedness of organisms is best reflected in phylogenetic tree

Topic : Taxonomy of Microorganisms

Section : 01.07

Learning Outcome : Discuss the fundamentals of evolution, evidence used to verify evolutionary trends

Gradable : automatic

70) Living things ordinarily too small to be seen with the unaided eye are termed _____.

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CH01

Question Details

Bloom's : 01. Remember

Accessibility : Keyboard Navigation

ASM Topic : Module 02 Structure and Function

ASM Objective : 02.01 The structure and function of microorganisms have been revealed by the use of m

Section : 01.01

Learning Outcome : Define microbiology and microorganisms, and identify the major organisms included

Topic : History of Microbiology

Gradable : automatic

71) Microorganisms composed only of hereditary material wrapped in a protein covering are referred to as _____.

Question Details

Bloom's : 01. Remember

Accessibility : Keyboard Navigation

Section : 01.02

ASM Topic : Module 04 Information Flow

Learning Outcome : Describe the cellular makeup of microorganisms and their size range, and indicate

Topic : General Viral Properties

ASM Objective : 04.04 The synthesis of viral genetic material and proteins is dependent on host cells

Gradable : automatic

72) Specialized internal structures, called _____, are found in eukaryotes but not in prokaryotes.

Question Details

Bloom's : 01. Remember

Accessibility : Keyboard Navigation

Section : 01.02

Learning Outcome : Describe the basic characteristics of prokaryotic cells and eukaryotic cells and t

ASM Topic : Module 02 Structure and Function

Topic : Cellular Organization

ASM Objective : 02.04 While microscopic eukaryotes (for example, fungi, protozoa, and algae) carry ou

Activity Type : New

Gradable : automatic

73) Well-known diseases that are increasing in occurrence are referred to as _____ diseases.

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CH01

Question Details

ASM Topic : Module 05 Systems

ASM Objective : 05.04 Microorganisms, cellular and viral, can interact with both human and nonhuman h

Topic : Microbial Roles

Bloom's : 01. Remember

Section : 01.04

Accessibility : Keyboard Navigation

Learning Outcome : Define what is meant by emerging and reemerging diseases.

Activity Type : New

Gradable : automatic

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

74) Discuss three different beneficial consequences and three different detrimental consequences of killing all microorganisms on the Earth.

Question Details

Learning Outcome : Review the roles of microorganisms as parasites and pathogens that cause infection

ASM Topic : Module 05 Systems

Topic : Microbial Roles

Section : 01.04

Accessibility : Keyboard Navigation

ASM Objective : 05.03 Microorganisms and their environment interact with and modify each other.

Learning Outcome : Discuss the ways microorganisms can be used to create solutions for environmental

ASM Topic : Module 06 Impact of Microorganisms

Section : 01.03

ASM Objective : 06.01 Microbes are essential for life as we know it and the processes that support li

Bloom's : 04. Analyze

Gradable : manual

75) Discuss five reasons why infectious diseases are increasing in number around the world.

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CH01

Question Details

Learning Outcome : Review the roles of microorganisms as parasites and pathogens that cause infection

ASM Topic : Module 05 Systems

ASM Objective : 05.04 Microorganisms, cellular and viral, can interact with both human and nonhuman h

Topic : Microbial Roles

Section : 01.04

Accessibility : Keyboard Navigation

Learning Outcome : Define what is meant by emerging and reemerging diseases.

Bloom's : 04. Analyze

Gradable : manual

76) Outline the experiment that Louis Pasteur did with swan-necked-shaped tubes to disprove spontaneous generation.

Question Details

Accessibility : Keyboard Navigation

Bloom's : 02. Understand

Learning Outcome : Outline the major events in the history of microbiology, including the major contri

Topic : History of Microbiology

Section : 01.05

ASM Topic : Module 07 Scientific Thinking

ASM Objective : 07.01b Ability to apply the process of science: Analyze and interpret results from a

Gradable : manual

77) Predict one reason why water contaminated by the algae *Microcystis* cannot be made safe by boiling.

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CH01

Question Details

Learning Outcome : Review the roles of microorganisms as parasites and pathogens that cause infection

ASM Topic : Module 05 Systems

ASM Objective : 05.04 Microorganisms, cellular and viral, can interact with both human and nonhuman h

Section : 01.04

Accessibility : Keyboard Navigation

Bloom's : 03. Apply

Topic : Epidemiology

Activity Type : New

Gradable : manual

78) Cases of chikungunya virus in the United States are primarily restricted to Florida and the Southeastern coast. Briefly explain a reason for this distribution.

Question Details

ASM Topic : Module 05 Systems

Section : 01.04

Accessibility : Keyboard Navigation

ASM Objective : 05.03 Microorganisms and their environment interact with and modify each other.

Bloom's : 03. Apply

Topic : Epidemiology

Learning Outcome : Define what is meant by emerging and reemerging diseases.

Activity Type : New

Gradable : manual

79) Briefly explain (1) why hospitals are such a common source of infectious disease and (2) why aseptic technique limits infection.

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CH01

Question Details

ASM Topic : Module 05 Systems

ASM Objective : 05.04 Microorganisms, cellular and viral, can interact with both human and nonhuman h

Accessibility : Keyboard Navigation

Learning Outcome : Outline the major events in the history of microbiology, including the major contri

Topic : History of Microbiology

Section : 01.05

Activity Type : New

Bloom's : 04. Analyze

Gradable : manual

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CH01

Answer Key

Test name: CH01

- 1) TRUE
- 2) TRUE
- 3) FALSE
- 4) FALSE
- 5) TRUE
- 6) FALSE
- 7) TRUE
- 8) FALSE
- 9) FALSE
- 10) TRUE
- 11) FALSE
- 12) FALSE
- 13) FALSE
- 14) TRUE
- 15) FALSE
- 16) FALSE
- 17) TRUE
- 18) C
- 19) A
- 20) B
- 21) B
- 22) A
- 23) D
- 24) C
- 25) E

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- 26) B
- 27) C
- 28) A
- 29) E
- 30) B
- 31) C
- 32) D
- 33) E
- 34) B
- 35) D
- 36) A
- 37) B
- 38) B
- 39) D
- 40) A
- 41) B
- 42) A
- 43) C
- 44) B
- 45) E
- 46) B
- 47) C
- 48) A
- 49) A
- 50) A
- 51) C
- 52) D
- 53) A
- 54) D
- 55) C

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- 56) B
- 57) A
- 58) E
- 59) A
- 60) D
- 61) C
- 62) B
- 63) B
- 64) C
- 65) A
- 66) C
- 67) A
- 68) taxonomy
- 69) Evolution
- 70) microorganisms
- 71) viruses
- 72) organelles
- 73) reemerging