

# Biodiversity and Classification of Microorganisms

Biology · Answer Key · 23 Questions

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**1. What are the main concepts covered in this study material regarding microorganisms?**

- A) Microorganisms, Microscopic organisms, Biodiversity, Prokaryote & Eukaryote**
- B) Photosynthesis, Respiration, Metabolism
- C) Genetics, Evolution, Ecology
- D) Cellular division, Reproduction, Growth

**2. Which of the following is NOT listed as a microorganism being studied?**

- A) Viruses
- B) Bacteria
- C) Protista
- D) Fungi**

**3. The study material mentions revising the structure of which cellular component?**

- A) Cell wall
- B) Nucleus**
- C) Mitochondria
- D) Ribosome

**4. What are the two main categories of organisms discussed in terms of cellular structure?**

- A) Autotrophs & Heterotrophs
- B) Prokaryote & Eukaryote**
- C) Aerobic & Anaerobic
- D) Unicellular & Multicellular

**5. Which kingdom is referred to as 'mineral (bacteria)' in the study material?**

- A) Kingdom Animalia
- B) Kingdom Plantae
- C) Kingdom Monera**
- D) Kingdom Fungi

**6. The material covers the basic structure and general characteristics of viruses, bacteria, and which other kingdom?**

- A) Archaea
- B) Protista**
- C) Fungi
- D) Plantae

7. What is a significant role of microorganisms mentioned in the study material?

- A) Causing diseases
- B) Maintaining balance in the environment**
- C) Producing oxygen
- D) Decomposing rocks

8. Which of the following is an example of a symbiotic relationship involving nitrogen-fixing bacteria?

- A) E. coli in the human gut
- B) Rhizobium in legume root nodules**
- C) Yeast in bread making
- D) Staphylococcus on skin

9. The study material mentions E. coli in the context of:

- A) Nitrogen fixation
- B) Symbiotic relationships**
- C) Disease management
- D) Immunity

10. The material discusses the effects and management of diseases caused by microorganisms. How many examples are to be covered from each group?

- A) Two
- B) One**
- C) Three
- D) None

11. What is immunity defined as in the study material?

- A) The ability of a microorganism to cause disease
- B) The body's defense system against infection**
- C) The process of photosynthesis
- D) The rate of microbial growth

12. What are the two types of immunity mentioned?

- A) Active & Passive
- B) Innate & Adaptive
- C) Natural & Acquired**
- D) Humoral & Cell-mediated

**13. Which kingdom is characterized by organisms that are generally microscopic and can be prokaryotic or eukaryotic?**

- A) Fungi
- B) Protista**
- C) Bacteria
- D) Viruses

**14. What is a key characteristic of viruses that distinguishes them from bacteria and protists?**

- A) They are always prokaryotic.
- B) They are considered living organisms.
- C) They require a host cell to replicate.**
- D) They can perform photosynthesis.

**15. Bacteria are classified as:**

- A) Eukaryotes
- B) Prokaryotes**
- C) Viruses
- D) Protists

**16. Protista is a kingdom that includes a diverse group of:**

- A) Multicellular organisms
- B) Prokaryotic organisms
- C) Unicellular eukaryotic organisms**
- D) Viruses

**17. What is the primary role of nitrogen-fixing bacteria in the environment?**

- A) Decomposing organic matter
- B) Converting atmospheric nitrogen into a usable form for plants**
- C) Causing plant diseases
- D) Producing antibiotics

**18. E. coli is often studied for its role in:**

- A) The nitrogen cycle
- B) The human digestive system**
- C) Decomposition of dead organisms
- D) Producing vaccines

**19. The study of immunity is concerned with the body's response to:**

- A) Nutrients
- B) Water
- C) Pathogens**
- D) Sunlight

**20. Natural immunity is also known as:**

- A) Acquired immunity
- B) Innate immunity**
- C) Passive immunity
- D) Active immunity

**21. Acquired immunity is developed through:**

- A) Genetics alone
- B) Exposure to pathogens or vaccination**
- C) The presence of a nucleus
- D) The absence of microorganisms

**22. The study material mentions 'Plants immune response'. This refers to:**

- A) How plants digest food
- B) How plants respond to environmental changes like temperature
- C) How plants defend themselves against pathogens**
- D) How plants reproduce

**23. Microorganisms are defined as organisms that are:**

- A) Visible to the naked eye
- B) Too small to be seen without a microscope**
- C) Always harmful
- D) Only found in water