

Protists and Fungi: A Biological Overview

Biology · Answer Key · 29 Questions

1. Which kingdom includes mostly unicellular organisms that do not fit into other kingdoms?

- A) Fungi
- B) Protists**
- C) Animals
- D) Plants

2. Which kingdom is known for its greatest diversity with over 200,000 known species?

- A) Fungi
- B) Protists**
- C) Bacteria
- D) Archaea

3. Protists are difficult to classify due to a large variety of organisms with different what?

- A) Cell sizes
- B) Number of nuclei
- C) Modes of nutrition, locomotion, cell coverings, and life cycles**
- D) Reproductive strategies

4. Which group of protists are animal-like, unicellular, and heterotrophic?

- A) Algae
- B) Slime and water moulds
- C) Protozoa**
- D) Diatoms

5. Which group of protists are plant-like, uni- or multicellular, and autotrophic?

- A) Protozoa
- B) Slime and water moulds
- C) Dinoflagellates
- D) Algae**

6. Which protist group is described as fungus-like and multicellular?

- A) Algae
- B) Protozoa
- C) Slime and water moulds**
- D) Euglena

7. All protists possess true nuclei, meaning they are:

- A) Prokaryotic
- B) Eukaryotic**
- C) Autotrophic
- D) Heterotrophic

8. Algae can photosynthesize because they contain:

- A) Mitochondria
- B) Chloroplasts**
- C) Ribosomes
- D) Vacuoles

9. Which type of locomotion is characteristic of amoeba?

- A) Cilia
- B) Flagella
- C) Pseudopodia**
- D) None

10. Paramecium uses which structure for locomotion?

- A) Pseudopodia
- B) Flagella
- C) Cilia**
- D) Tentacles

11. Euglena and dinoflagellates utilize which for movement?

- A) Cilia
- B) Pseudopodia
- C) Flagella**
- D) Suckers

12. Protozoa ingest their food through a process called:

- A) Photosynthesis
- B) Osmosis
- C) Phagocytosis**
- D) Fermentation

13. The cell wall of green algae is composed of:

- A) Silica
- B) Chitin
- C) Cellulose**
- D) Peptidoglycan

14. Diatoms have cell walls made of:

- A) Cellulose
- B) Chitin
- C) Silica**
- D) Calcium carbonate

15. Reproduction in protists is mostly asexual, commonly by:

- A) Meiosis
- B) Fertilization
- C) Binary fission**
- D) Budding

16. Protists are typically found in environments where:

- A) It is very dry
- B) Water occurs**
- C) There is no light
- D) Temperatures are extremely high

17. Which of the following are examples of Protozoa?

- A) Red algae, brown algae
- B) Mushrooms, yeasts
- C) Amoeba, paramecium, plasmodium**
- D) Spirogyra, diatoms

18. Which of the following are examples of Algae?

- A) Amoeba, plasmodium
- B) Yeasts, moulds
- C) Diatoms, Euglena, dinoflagellates**
- D) Slime moulds

19. Macroscopic fungi include organisms like:

- A) Yeasts
- B) Bread mould
- C) Mushrooms**
- D) Athlete's foot fungus

20. Microscopic fungi include organisms like:

- A) Mushrooms
- B) Moulds
- C) Yeasts
- D) All of the above**

21. All fungi have true nuclei, meaning they are:

- A) Prokaryotic
- B) Eukaryotic**
- C) Autotrophic
- D) Heterotrophic

22. The cell walls of all fungi are made up of:

- A) Cellulose
- B) Chitin**
- C) Silica
- D) Lignin

23. Fungi have no chlorophyll and are therefore:

- A) Autotrophic
- B) Photosynthetic
- C) Heterotrophic**
- D) Chemosynthetic

24. Most fungi are saprophytes, meaning they live off:

- A) Living animals
- B) Living plants
- C) Dead organic matter**
- D) Sunlight

25. A fungus that feeds on living material is called a:

- A) Saprophyte
- B) Mutualist
- C) Parasite**
- D) Decomposer

26. Unicellular fungi reproduce asexually by:

- A) Spores
- B) Gametes
- C) Binary fission**
- D) Fertilization

27. Multicellular fungi reproduce asexually by:

- A) Gametes
- B) Spores**
- C) Binary fission
- D) Budding

28. Multicellular fungi reproduce sexually by:

- A) Spores
- B) Binary fission
- C) Gametes**
- D) Budding

29. Rhizopus is an example of a multicellular fungus that consists of a mass of branched filaments called:

- A) Mycelium
- B) Rhizoids
- C) Sporangioophores
- D) Hyphae**