

Fungal Biology Quiz

Biology · Answer Key · 24 Questions

1. Which fungal disease affects plants and is caused by Basidiomycota?

- A) Powdery mildew
- B) Late blight
- C) Rusts**
- D) Smuts
- E) Root rot

2. The term "thallus" in fungi refers to:

- A) The spore-producing organ
- B) The reproductive hyphae
- C) The root-like structure
- D) The fungal body**
- E) The dikaryotic cell

3. What is the role of sporangia in fungi?

- A) Sexual reproduction
- B) Asexual spore production**
- C) Photosynthesis
- D) Nutrient absorption
- E) Digestion

4. Which phylum includes the yeast *Saccharomyces cerevisiae*?

- A) Zygomycota
- B) Basidiomycota
- C) Ascomycota**
- D) Chytridiomycota
- E) Deuteromycota

5. Fungi obtain their energy by:

- A) Photosynthesis
- B) Chemosynthesis
- C) Ingesting food
- D) Absorbing nutrients from their surroundings**
- E) Fixation of atmospheric gas

6. Which of the following is NOT a characteristic of fungi?

- A) Eukaryotic cells
- B) Heterotrophic
- C) Cell wall with chitin
- D) Photosynthesis**
- E) Filamentous growth

7. Which structure in fungi is haploid during most of its life cycle?

- A) Zygote
- B) Zygosporangium
- C) Ascocarp
- D) Spore**
- E) Basidiocarp

8. The specialized hyphae that fungi use to anchor themselves to a substrate are called:

- A) Haustoria
- B) Rhizoids**
- C) Septa
- D) Sporangiohores
- E) Conidiophores

9. Fungi classified under Zygomycota produce:

- A) Asci
- B) Basidia
- C) Zygosporangia**
- D) Zoospores
- E) Conidia

10. Which of these is a feature of chytrids?

- A) Lack of cell walls
- B) Motile spores**
- C) Terrestrial lifestyle only
- D) Production of ascocarps
- E) Lack of reproduction

11. Which fungal phylum is known as "sac fungi"?

- A) Zygomycota
- B) Basidiomycota
- C) Ascomycota**
- D) Chytridiomycota
- E) Deuteromycota

12. The toxic compound produced by *Aspergillus flavus* is:

- A) Citric acid
- B) Penicillin
- C) Aflatoxin**
- D) Ethanol
- E) Ergosterol

13. Which fungi play a key role in the production of antibiotics?

- A) *Rhizopus stolonifer*
- B) *Candida albicans*
- C) *Penicillium notatum***
- D) *Saccharomyces cerevisiae*
- E) *Aspergillus niger*

14. Which fungi cause the plant disease "late blight" in potatoes?

- A) *Phytophthora infestans***
- B) *Rhizopus stolonifer*
- C) *Aspergillus flavus*
- D) *Penicillium chrysogenum*
- E) *Candida albicans*

15. The term "sporangium" refers to:

- A) A structure containing spores**
- B) A type of mycelium
- C) A sexual reproductive cell
- D) An enzyme
- E) A cell wall component

16. The sexual spore-producing structure in Ascomycota is called:

- A) Basidium
- B) Sporangium
- C) Ascus**
- D) Conidiophore
- E) Zygospore

17. What is the main ecological role of saprophytic fungi?

- A) Nitrogen fixation
- B) Production of antibiotics
- C) Decomposing organic matter**
- D) Photosynthesis
- E) Symbiosis with plants

18. Which fungal phylum has flagellated gametes and spores?

A) Chytridiomycota

- B) Basidiomycota
- C) Ascomycota
- D) Zygomycota
- E) Deuteromycota

19. Asexual reproduction in fungi often involves the formation of:

A) Conidia

- B) Zygozoospores
- C) Basidiospores
- D) Ascospores
- E) Asci

20. The fungi responsible for athlete's foot belong to:

- A) Zygomycota
- B) Basidiomycota
- C) Ascomycota**
- D) Chytridiomycota
- E) Deuteromycota

21. The term "heterotrophic" in fungi means:

- A) They perform photosynthesis
- B) They produce their own food
- C) They rely on organic matter for nutrition**
- D) They live in aquatic environments
- E) They fix nitrogen

22. The fruiting body of Basidiomycota is commonly called:

- A) Spore
- B) Mushroom**
- C) Ascocarp
- D) Hypha
- E) Mycelium

23. Which structure is unique to the phylum Basidiomycota?

- A) Ascospore
- B) Basidiospore
- C) Basidium**
- D) Conidia
- E) Sporangium

24. The yeast *Candida albicans* can cause infections in humans primarily when:

A) The immune system is weakened

B) The dog is doing something

C) Arsenal wins the premier league

D) It interacts with bacteria

E) There is excess nitrogen in the body