SCHOLAREYE.XYZ • BIOLOGY MCQ SERIES



KINGDOM FUNGI

50 Solved Biology MCQs

Ticked • Highlighted • Fully Explained

scholareye.xyz

Contents & How to Use

Each question shows four options. The **correct answer is highlighted in green with a tick**, followed by a short explanation. Tap any item below to jump straight to it.

Section 1: Fungi Basics	**Q1–10**
Section 2: Structure & Nutrition	**Q11–20**
Section 3: Reproduction & Spores	**Q21–30**
Section 4: Classification & Examples	**Q31–40**
Section 5: Importance & Diseases	**Q41–50**

Quick Answer Key → (last page before the end)

Did you know? Try covering the options first, answer from memory, then check the tick!

Section 1: Fungi Basics

Questions 1 – 10

Q1 Fungi are:

- ○ A. Prokaryotic autotrophs
- ○ B. Eukaryotic autotrophs
- ○ C. Prokaryotic heterotrophs
- ✔ **D. Eukaryotic, heterotrophic organisms**

✔ **Answer: D**
Explanation: They lack chlorophyll and absorb nutrients from their surroundings.

Q2 The study of fungi is called:

- ○ A. Phycology
- ○ B. Bacteriology
- ✔ **C. Mycology**
- ○ D. Virology

✔ **Answer: C**
Explanation: The word comes from Greek mykes, meaning fungus.

Q3 **Fungal cell walls are made mainly of:**

- ○ A. Cellulose
- ✔ **B. Chitin**
- ○ C. Peptidoglycan
- ○ D. Lignin

✔ **Answer: B**
Explanation: Chitin is a tough nitrogen-containing polysaccharide.

Q4 **Fungi lack:**

- ○ A. A nucleus
- ✔ **B. Chlorophyll**
- ○ C. A cell wall
- ○ D. Mitochondria

✔ **Answer: B**
Explanation: Hence they cannot make food by photosynthesis.

Q5	Fungi store their food mainly as:
✔	**A. Glycogen**
○	B. Starch
○	C. Paramylon
○	D. Cellulose

✔ **Answer: A**
Explanation: Like animals, fungi store glycogen and oil droplets.

Q6	Fungi grow best in:
○	A. Cold, dry conditions
○	B. Strong direct sunlight
○	C. Pure salt water
✔	**D. Warm, moist conditions**

✔ **Answer: D**
Explanation: Moisture and warmth favour growth, so food spoils quickly in humid weather.

Q7 **Which of these is a unicellular fungus?**

- ○ A. Mushroom
- ○ B. Rhizopus
- ✔ **C. Yeast**
- ○ D. Agaricus

✔ **Answer: C**
Explanation: Yeast (Saccharomyces) is a single-celled fungus.

Q8 **In the Five Kingdom system, fungi are placed in:**

- ○ A. Kingdom Plantae
- ○ B. Kingdom Monera
- ✔ **C. Their own kingdom**
- ○ D. Kingdom Protista

✔ **Answer: C**
Explanation: Whittaker separated fungi from plants in 1969.

Q9	Fungi are more closely related to:
○	A. Plants
✔	**B. Animals**
○	C. Bacteria
○	D. Algae

✔ **Answer: B**
Explanation: Molecular studies show fungi and animals share a common ancestor.

Q10	Fungi that live on dead organic matter are:
✔	**A. Saprophytes**
○	B. Parasites
○	C. Symbionts
○	D. Autotrophs

✔ **Answer: A**
Explanation: They secrete enzymes and absorb the digested food.

Did you know? The honey fungus Armillaria in Oregon spreads over roughly 9 square kilometres, among the largest living organisms!

Section 2: Structure & Nutrition

Questions 11 – 20

Q11 **The thread-like filaments of a fungus are called:**

- ○ A. Rhizoids
- ○ B. Stolons
- ○ C. Flagella
- ✔ **D. Hyphae**

✔ **Answer: D**
Explanation: Hyphae are tubular cells that form the fungal body.

Q12 **A network or mass of hyphae is called a:**

- ○ A. Thallus
- ○ B. Plasmodium
- ○ C. Sporangium
- ✔ **D. Mycelium**

✔ **Answer: D**
Explanation: The mycelium absorbs nutrients from the substrate.

Q13 **Hyphae without cross walls are:**

- ○ A. Septate
- ○ B. Unicellular
- ✔ **C. Coenocytic (aseptate)**
- ○ D. Dikaryotic

✔ **Answer: C**
Explanation: They have many nuclei in continuous cytoplasm, as in Rhizopus.

Q14 **Hyphae with cross walls are called:**

- ○ A. Coenocytic
- ✔ **B. Septate**
- ○ C. Aseptate
- ○ D. Acellular

✔ **Answer: B**
Explanation: Septate hyphae occur in Penicillium, Aspergillus and mushrooms.

Q15	Fungi digest their food:
✔	**A. Outside the body, then absorb it**
○	B. Inside a stomach
○	C. By photosynthesis
○	D. With a mouth and gut

✔ **Answer: A**
Explanation: Secreted enzymes break down food externally.

Q16	Parasitic fungi absorb food from the host using:
✔	**A. Haustoria**
○	B. Rhizoids
○	C. Stolons
○	D. Sporangiophores

✔ **Answer: A**
Explanation: Haustoria are special hyphae that penetrate host cells.

Q17 **The mode of nutrition in most fungi is:**

- ○ A. Photosynthetic
- ○ B. Chemosynthetic
- ○ C. Holozoic
- ✔ **D. Absorptive**

✔ **Answer: D**
Explanation: Fungi absorb dissolved nutrients through the cell wall and membrane.

Q18 **Rhizopus anchors itself to the substrate by:**

- ○ A. Roots
- ○ B. Haustoria
- ✔ **C. Rhizoids**
- ○ D. Tendrils

✔ **Answer: C**
Explanation: Rhizoids also help absorb nutrients.

Q19 **The horizontal hyphae of Rhizopus are called:**

- ○ A. Rhizoids
- ✔ **B. Stolons**
- ○ C. Sporangiophores
- ○ D. Conidiophores

✔ **Answer: B**
Explanation: Stolons spread across the surface of the bread.

Q20 **A symbiotic association of a fungus with an alga is a:**

- ○ A. Mycorrhiza
- ✔ **B. Lichen**
- ○ C. Rust
- ○ D. Smut

✔ **Answer: B**
Explanation: The fungus protects the alga, which makes food by photosynthesis.

Did you know? Fungi can break down tough materials like wood and leaves, recycling nutrients back into the soil.

Section 3: Reproduction & Spores

Questions 21 – 30

Q21	Asexual spores formed inside a sporangium are:
✔	**A. Sporangiospores**
○	B. Conidia
○	C. Ascospores
○	D. Basidiospores

✔ **Answer: A**
Explanation: They are typical of Rhizopus and Mucor.

Q22	Asexual spores borne on the tips of conidiophores are:
○	A. Ascospores
○	B. Zygospores
○	C. Basidiospores
✔	**D. Conidia**

✔ **Answer: D**
Explanation: Seen in Penicillium and Aspergillus.

Q23 **Spores produced inside an ascus are:**

- ○ A. Basidiospores
- ○ B. Zygospores
- ✔ **C. Ascospores**
- ○ D. Conidia

✔ **Answer: C**
Explanation: Ascomycetes typically form eight ascospores per ascus.

Q24 **Spores formed on a basidium are:**

- ○ A. Ascospores
- ○ B. Zygospores
- ✔ **C. Basidiospores**
- ○ D. Sporangiospores

✔ **Answer: C**
Explanation: Mushrooms produce them on their gills.

Q25 **The thick-walled sexual spore of Rhizopus is the:**

- ○ A. Ascospore
- ✔ **B. Zygospore**
- ○ C. Conidium
- ○ D. Basidiospore

✔ **Answer: B**
Explanation: It forms by fusion of two compatible hyphae.

Q26 **Fusion of the protoplasts of two cells is called:**

- ✔ **A. Plasmogamy**
- ○ B. Karyogamy
- ○ C. Meiosis
- ○ D. Plasmolysis

✔ **Answer: A**
Explanation: Cytoplasm fuses first, and nuclei fuse later.

Q27 **Fusion of two nuclei in fungi is called:**

- ○ A. Plasmogamy
- ○ B. Mitosis
- ○ C. Budding
- ✔ **D. Karyogamy**

✔ **Answer: D**
Explanation: It follows plasmogamy and forms a diploid nucleus.

Q28 **A cell containing two genetically different haploid nuclei is:**

- ○ A. Diploid
- ○ B. Haploid
- ○ C. Polyploid
- ✔ **D. Dikaryotic**

✔ **Answer: D**
Explanation: The dikaryotic (n+n) stage is typical of ascomycetes and basidiomycetes.

Q29 **Yeast reproduces asexually mainly by:**

- ○ A. Binary fission
- ○ B. Zoospores
- ✔ **C. Budding**
- ○ D. Seeds

✔ **Answer: C**
Explanation: A small bud grows from the parent cell and then detaches.

Q30 **Vegetative reproduction in fungi occurs by:**

- ○ A. Seeds
- ✔ **B. Fragmentation of hyphae**
- ○ C. Gametes only
- ○ D. Pollination

✔ **Answer: B**
Explanation: A broken piece of hypha can grow into a new mycelium.

Did you know? A single mushroom can release millions of spores in just a day!

Section 4: Classification & Examples

Questions 31 – 40

Q31 **The common bread mould is:**

- ✔ **A. Rhizopus**
- ○ B. Agaricus
- ○ C. Puccinia
- ○ D. Saccharomyces

✔ **Answer: A**
Explanation: It belongs to the Zygomycetes.

Q32 **Zygomycetes include:**

- ✔ **A. Rhizopus and Mucor**
- ○ B. Penicillium and Aspergillus
- ○ C. Puccinia and Ustilago
- ○ D. Agaricus and Pleurotus

✔ **Answer: A**
Explanation: They form zygospores and have coenocytic hyphae.

Q33 Neurospora is a member of:

- ○ A. Zygomycetes
- ○ B. Basidiomycetes
- ○ C. Oomycetes
- ✔ **D. Ascomycetes (sac fungi)**

✔ **Answer: D**
Explanation: It forms ascospores inside asci.

Q34 Mushrooms belong to:

- ○ A. Ascomycetes
- ○ B. Zygomycetes
- ✔ **C. Basidiomycetes**
- ○ D. Deuteromycetes

✔ **Answer: C**
Explanation: They are club fungi producing basidiospores.

Q35 Puccinia causes:

- ○ A. Smut of wheat
- ✔ **B. Rust of wheat**
- ○ C. Late blight of potato
- ○ D. Red rot of sugarcane

✔ **Answer: B**
Explanation: Puccinia graminis is the black stem rust fungus.

Q36 **Ustilago causes:**

- ○ A. Rust
- ✔ **B. Smut**
- ○ C. Powdery mildew
- ○ D. Wilt

✔ **Answer: B**
Explanation: Smuts blacken the grains, as in loose smut of wheat.

Q37 **A commonly cultivated edible mushroom is:**

- ✔ **A. Agaricus bisporus**
- ○ B. Amanita phalloides
- ○ C. Aspergillus flavus
- ○ D. Claviceps purpurea

✔ **Answer: A**
Explanation: It is the familiar button mushroom.

Q38 **A deadly poisonous mushroom is:**

- ○ A. Agaricus bisporus
- ○ B. Pleurotus ostreatus
- ○ C. Volvariella volvacea
- ✔ **D. Amanita phalloides (death cap)**

✔ **Answer: D**
Explanation: It contains amatoxins that damage the liver.

Q39 **Fungi with no known sexual stage were once placed in:**

- ○ A. Ascomycetes
- ○ B. Zygomycetes
- ✔ **C. Deuteromycetes**
- ○ D. Basidiomycetes

✔ **Answer: C**
Explanation: They are also called imperfect fungi, e.g., Alternaria.

Q40 **The umbrella-shaped fruiting body of a mushroom is the:**

- ○ A. Ascocarp
- ○ B. Sporangium
- ✔ **C. Basidiocarp**
- ○ D. Plasmodium

✔ **Answer: C**
Explanation: Its gills bear the basidia.

Did you know? Truffles, a kind of underground fungus, are among the most expensive foods in the world.

Section 5: Importance & Diseases

Questions 41 – 50

Q41 **The antibiotic penicillin was discovered by:**

- ○ A. Louis Pasteur
- ✔ **B. Alexander Fleming**
- ○ C. Robert Koch
- ○ D. Edward Jenner

✔ **Answer: B**
Explanation: In 1928 he noticed Penicillium mould killing nearby bacteria.

Q42 **Penicillin is obtained from:**

✔ **A. Penicillium**

○ B. Aspergillus niger

○ C. Rhizopus

○ D. Saccharomyces

✔ **Answer: A**
Explanation: Penicillium species produce the antibiotic.

Q43 **Yeast is widely used in:**

○ A. Nitrogen fixation

○ B. Water purification

○ C. Making vaccines only

✔ **D. Baking and brewing**

✔ **Answer: D**
Explanation: It ferments sugars into carbon dioxide and ethanol.

Q44 **Citric acid is commercially produced using:**

- ○ A. Rhizopus
- ○ B. Penicillium notatum
- ○ C. Agaricus
- ✔ **D. Aspergillus niger**

✔ **Answer: D**
Explanation: This mould ferments sugars into citric acid.

Q45 **Ringworm is caused by:**

- ○ A. A bacterium
- ○ B. A virus
- ✔ **C. A fungus**
- ○ D. A protozoan

✔ **Answer: C**
Explanation: It affects the skin, hair and nails.

Q46	Mycorrhiza is an association of a fungus with:
○	A. Algae
✔	**B. Roots of higher plants**
○	C. Mosses
○	D. Cyanobacteria

✔ **Answer: B**
Explanation: The fungus aids absorption of water and minerals; the plant supplies sugars.

Q47	Aflatoxins are produced by:
✔	**A. Aspergillus flavus**
○	B. Penicillium notatum
○	C. Rhizopus
○	D. Yeast

✔ **Answer: A**
Explanation: They contaminate stored grains and are carcinogenic.

Q48 **Blue-veined Roquefort cheese is ripened using:**

✔ **A. Penicillium roqueforti**

○ B. Aspergillus niger

○ C. Rhizopus

○ D. Agaricus

✔ **Answer: A**
Explanation: The mould forms blue-green veins in the cheese.

Q49 **Ergot disease of rye is caused by:**

○ A. Puccinia

○ B. Ustilago

○ C. Alternaria

✔ **D. Claviceps purpurea**

✔ **Answer: D**
Explanation: Its toxins can cause poisoning known as ergotism.

Q50 **Which of these is NOT a fungus?**

- ○ A. Yeast
- ○ B. Mushroom
- ✔ **C. Spirogyra**
- ○ D. Penicillium

✔ **Answer: C**

Explanation: Spirogyra is a green alga.

Did you know? Penicillin, first made from a mould, has saved millions of lives.

Quick Answer Key

Tap a question to jump back to its explanation.

Q1 → D	Q11 → D	Q21 → A	Q31 → A	Q41 → B
Q2 → C	Q12 → D	Q22 → D	Q32 → A	Q42 → A
Q3 → B	Q13 → C	Q23 → C	Q33 → D	Q43 → D
Q4 → B	Q14 → B	Q24 → C	Q34 → C	Q44 → D
Q5 → A	Q15 → A	Q25 → B	Q35 → B	Q45 → C
Q6 → D	Q16 → A	Q26 → A	Q36 → B	Q46 → B
Q7 → C	Q17 → D	Q27 → D	Q37 → A	Q47 → A
Q8 → C	Q18 → C	Q28 → D	Q38 → D	Q48 → A
Q9 → B	Q19 → B	Q29 → C	Q39 → C	Q49 → D
Q10 → A	Q20 → B	Q30 → B	Q40 → C	Q50 → C



Great Job, Scholar!

You have completed all 50 MCQs
on Kingdom Fungi.
Revise the explanations and ace your test!

Visit scholareye.xyz

More free MCQs • Notes • Online tests

© ScholarEye.xyz — Learn. Practice. Succeed.