**Fungi Classification**

**I. Kingdom Characteristics**

**1. Circle the letter of the sentence that is true about fungi.**

a. Fungi are heterotrophic organisms lacking chlorophyll.

b. They are made of long, slender filamentous bodies.

c. Cell walls are made of cellulose.

d. Some fungi are parasitic.

**2. Differentiate between hyphae and mycelium.**

Hyphae : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Mycelium : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**3.**  **What reproductive structure do fungi produce?** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**II. *Phylum Deuteromycota*** *(“Imperfect Fungi”)*

**1. Fungi capable of asexual reproduction only are called** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**2. List the commercially-used product of each fungus.**

*Penicillium* *roqueforti* : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Aspergillus* *niger* : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Aspergillus* *terreus* : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**III. *Phylum Zygomycota*** *(“Common Molds”)*

**1. What are zygomycetes?**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**2. Match the terms with the correct definitions.**

1. \_\_\_\_\_\_\_\_ *Sporangia* A. Specialized hyphae; Look like stalks

2. \_\_\_\_\_\_\_\_ *Sporangiophore* B. Root-like hyphae that anchor fungi

3. \_\_\_\_\_\_\_\_ Stolons C. Spore producing structures in fungi

4. \_\_\_\_\_\_\_\_ Rhizoids D. Mycelia that grow along the surface

**3. List four uses of the *Rhizopus* fungus.**

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**4. What is the common name for *Rhizopus stolonifer*?** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**IV. *Phylum Ascomycota*** *(“Sac Fungi”)*

**1. Define the term ascus.**

Ascus –

**2. Ascomycetes make up the largest phylum in the Kingdom Fungi.**

Circle One : True False

**3. Identify the product or disease caused the following ascomycete fungi.**

Product Disease

*Aspergillus oryzae* : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ *Aspergillus flavus* : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Morchella esculenta* : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ *Candida albicans* : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Neurospora cressa* : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ *Cryphonectria parasitica* : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Penicillium* *chrysogenum* : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ *Microsporum audounii* : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Saccharomyces cerevisiae* : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ *Ophiostoma ulmi* : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Tuber melanosporum* : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**V. *Phylum Basidiomycota*** *(“Club Fungi”)*

**1. Define the term basidium.**

Basidium –

**2. Asexual reproduction is uncommon among basidiomycetes.**

Circle One : True False

**3. Identify the use, product, or disease of the following basidiomycetes.**

*Amanita muscaria*: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Armillaria bulbosa* : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Boletus edulis* : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Calvatia gigante* : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Fomes fomentarius* :\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Phallus impudicus* : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Puccinia graminis* : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Ustilago maydis* : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_