

NAME

SS#

**EXAM 2**  
**March 26, 2002**  
**BIO 329**

**Directions:** All explanations, definitions, and descriptions should be presented in good English. This means complete sentences should be used except when lists or fill-in-the-blanks are required. Spelling of mycological terms should be accurate. Slight misspellings may be overlooked, but major misspellings will result in wrong answers.

1. Multiple choice (30 pts @ 2 each); circle the number of the correct choice.
  - a. A mycosis of the skin or hair in which a host cellular response is uncommon is known as a
    1. dematomycosis
    2. dermatophytosis
    3. subcutaneous mycosis
    4. superficial mycosis
    5. none of these choices
  - b. *Trichophyton schoenleinii* is traditionally most associated with
    1. tinea nigra
    2. tinea pedis
    3. tinea favosa
    4. tinea versicolor
    5. none of these choices
  - c. The subcutaneous mycosis category of infections generally does not include
    1. trichosporonosis
    2. chromoblastomycosis
    3. white grain mycetoma
    4. phaeohyphomycosis
    5. lobomycosis
  - d. A dermatophytosis of the glabrous skin other than the groin and periannal regions is called by physicians
    1. tinea imbricata
    2. tinea cruris
    3. tinea manuum
    4. tinea nigra

5. none of these choices
- e. An onychomycosis caused by a dermatophyte is termed more specifically
1. tinea unguium
  2. tinea corporis
  3. tinea favosa
  4. tinea barbae
  5. none of these choices
- f. The most common agent of tinea pedis in the U.S.A. is probably
1. *Trichophyton mentagrophytes*
  2. *Trichosporon beigellii*
  3. *Microsporum canis*
  4. *Epidermophyton floccosium*
  5. none of these choices
- g. The treatment of choice for pityriasis versicolor today may be
1. Selsen Blue shampoo
  2. griseofulvin pills
  3. Nizerol (ketoconazole) creams and pills
  4. Sporonox (itraconazole) pills
  5. Lamisil (terbinafin) tablets
- h. *Piedraia hortae* is
1. the cause of black piedra
  2. a loculoascomycete
  3. a dematiaceous fungus
  4. a superficial invader of hair
  5. all of these choices
- i. Chromoblastomycosis is not caused by
1. *Phialophora verrucosa*
  2. *Cladophialophora carrionii*
  3. *Fonsecaea pedrosoi*
  4. *Wangiella/Exophiala dermatitidis*
  5. any of these choices
- j. Brain infections are not associated with
1. *Cladophialophora bantiana*
  2. *Wangiella/Exophiala dermatitidis*
  3. *Maderella mycetomatis*

4. *Fonsecaea pedrosoi*
  5. any of these choices
- k. Among the medically important fungi you have studied so far, homothallism leading to cleistothecia formation is most associated with
1. *Exophiala jeanselmei*
  2. *Piedraia hortae*
  3. *Trichosporon beigellii*
  4. *Pseudallescheria boydii*
  5. none of these choices
- l. Before effective antifungals became available, epilation was often the treatment of choice for
1. tinea capitis
  2. tinea unguium
  3. white piedra
  4. white grain mycetoma
  5. none of these choices
- m. A pathology that is initially eczemaform and followed by DTH allergic and inflammatory manifestations known as id is most associated with
1. dermatomycosis
  2. sporotrichosis
  3. tinea nigra
  4. pityriasis versicolor
  5. none of these choices
- n. Therapy involving supersaturated potassium iodide is most associated with
1. chromoblastomycosis
  2. tinea unguium
  3. black grain mycetoma
  4. pulmonary sporotrichosis
  5. none of these choices
- o. Screens of school children with a Wood=s lamp are most associated with
1. tinea versicolor
  2. prepubertal tinea capitis
  3. tinea nigra
  4. black dot tinea capitis
  5. tinea favosa
2. Fill in the blanks (25 pts @ 2.5 pts each)

- a. Although *Sporothrix schenckii* is a member of the Fungi Imperfecti, molecular phylogenetic analyses suggest it is an ascomycete of the class \_\_\_\_\_.
  - b. The *in vivo* tissue phases of fungi that cause eumycotic mycetomas are called \_\_\_\_\_.
  - c. The life threatening, opportunistic form of disease caused by the agent of white piedra is \_\_\_\_\_.
  - d. The outermost surface of the skin, which consists of dead skin scales and is used as substrate by agents of cutaneous forms of superficial mycoses and of some dermatophytes is the \_\_\_\_\_.
  - e. The ascocarp/ascoma of a dermatophytic fungus is a distinct type of cleistothecium called a \_\_\_\_\_.
  - f. When the hyphae of a dermatophytic fungus invades hair and then fragments into holoarthric thalloconidia in the hair itself, it is said to be an type of invasion.
  - g. Some Ascomycota and Fungi Imperfecti species are dark brown and black (dematiaceous) because \_\_\_\_\_ melanin is polymerized in their cell walls.
  - h. A primary brain infection that is caused by *Cladophialophora bantiana* is known as \_\_\_\_\_.
  - i. The opportunistic, life threatening form of disease sometimes caused by one agent of white grain mycetoma is \_\_\_\_\_.
  - j. The tissue phase of an agent of chromoblastomycosis is called a \_\_\_\_\_.
3. Short answers/definitions (20 pts @ 4 pts each): in only one complete sentence, with subject and verb, please.
- a. *Arthroderma*
  - b. Chaetothyriomycetes/Chaetothyriales

c. Phaeohyphomycosis

d. Synnemata

e. *Malassezia furfur*

**4. Essays:** Below please find two exam topics for you to respond to in essay fashion (see comments on page 1 about sentences and spelling). Please provide your responses on the attached lined sheets. If you write normal size your responses should be about one page long for each essay. Should you need additional space just use the backs of each lined page, or other pages of the exam.

- A. Essay 1 (15 points) Please compare and contrast the two subcutaneous mycoses known as chromoblastomycosis and sporotrichosis. Your essay should provide details about the pathology associated with each disease, the fungus and its growth form (morphology) in tissue and its therapy. You should not include a discussion of the nature of the species involved beyond one name for each disease agent and their tissue phases in vivo.
- B. Essay 2 (10 points) Very early in the history of the dermatophytoses it was recognized that there were at least three distinct types of scalp ringworms. Identify these types, and then in