

**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY  
SCHOOL OF HEALTH SCIENCES**

**END OF SEMESTER EXAMS  
HCD 3228: MEDICAL MYCOLOGY**

**SECTION A: Answer all the Questions in this section (3 Marks each)**

1. State the types of septal structures. **[3 Marks]**
2. Prolonged use of broad-spectrum antibiotics often leads to vulvovaginal super-infections. Briefly explain. **[3 Marks]**
3. State the effects of mycotoxicosis. **[3 Marks]**
4. Briefly describe how obesity predisposes one to fungal infections. **[3 Marks]**
5. State the biological importance of fungal spores. **[3 Marks]**
6. Climatic changes are known to increase exposure to mycotoxins. Briefly explain. **[3 Marks]**
7. State the unique characteristics of fungi. **[3 Marks]**
8. State THREE harmful effects of fungi. **[3 Marks]**
9. Nearly all fungi are free-living. Briefly describe how primary pathogens cause fungal infections in normal healthy humans. **[3 Marks]**
10. Briefly describe classification of mycosis based on site of infection **[3 Marks]**

**SECTION B: Answer ANY 2 (TWO) Questions in this section**

1. A 5 days old baby premature infant on intravenous nutrients and high-lipid fluids has developed a fungemia that cultures out on sabarouds agar only when overlaid (enriched) with sterile olive oil (lipids). Name the most likely causative agent. Describe the epidemiology, clinical manifestation, laboratory diagnosis and management of the causative agent. **[20 marks]**
  
2. Cryptococcal meningitis usually occurs among HIV persons with CD4+ lymphocyte counts less than 150 cells/ $\mu$ l. Name the causative agent and describe the epidemiology, clinical manifestation, laboratory diagnosis and management of Cryptococcal meningitis. **[20 marks]**
  
3. A newborn baby has developed a whitish milk curd like coating on her buccal mucosa. It appears to be painful on swallowing, coupled with dryness of the mouth, and loss of taste. Name the most likely causative agent. Describe the epidemiology, clinical manifestation, laboratory diagnosis and management of the causative agent. **[20 marks]**
  
4. a). Describe how fungi reproduce sexually and asexually. **(8 marks)**  
b). Describe aflatoxicosis **(12 marks)**