



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY**  
**SCHOOL OF HEALTH SCIENCES**  
**UNIVERSITY EXAMINATION FOR DEGREE OF BACHELOR OF SCIENCE**  
**PUBLIC HEALTH / COMMUNITY HEALTH AND DEVELOPMENT**  
**2<sup>ND</sup> YEAR 2<sup>ND</sup> SEMESTER 2015/2016 ACADEMIC YEAR**  
**KISII CAMPUS – PART TIME**

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**COURSE CODE: HCD 3228**

**COURSE TITLE: MEDICAL MYCOLOGY**

**EXAM VENUE: LR 18                      STREAM: (BSc. P. Health / Comm Hlth & Dev)**

**DATE: 13/12/16                      EXAM SESSION: 9.00 – 11.00 AM**

**TIME: 2.00 HOURS**

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**Instructions:**

- 1. Answer all the questions in Section A and ANY other 2 questions in Section B.**
- 2. Candidates are advised not to write on the question paper.**
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room.**

### **SECTION A (30 MARKS)**

1. State any three general characteristics of fungi (3 marks)
2. Explain three dimorphic nature of fungi (3 marks)
3. With the aid of diagrams differentiate between mycelium and pseudohyphae (3 marks)
4. Explain three types of sexual reproduction spores (3 marks)
5. Contrast the three mechanisms of sporangiospore and conidiospore formation in fungi (3marks)
6. Explain three fungal virulence factors (3 marks)
7. Differentiate between true pathogenic infection and opportunistic infection and give one example in each case (3 marks)
8. State three factors that can predispose one to fungal infections (3 marks)
9. State three methods used in laboratory diagnosis of fungi (3 marks)
10. State three beneficial uses of fungi to man (3 marks)

### **SECTION B (40 MARKS)**

1. Discuss the clinical classification of fungal infections and give five examples of diseases caused by them (20 marks)
2. Discuss candidiasis as an opportunistic mycosis using the following headings. (20 marks)
  - i. Causative Agent
  - ii. Epidemiology
  - iii. Pathogenesis
  - iv. Laboratory diagnosis
  - v. Management and prevention
3. Discuss four mechanisms of action of antifungal drugs (20 marks)
4. Individuals living in crowded areas such as a boarding school are at risk of acquiring cutaneous mycoses.
  - a. Discuss three likely cutaneous mycoses they are at risk of acquiring, giving the clinical manifestation of each (9 marks)
  - b. Discuss other two risk factors these individuals are exposed to (4 marks)
  - c. As a public health officer/educationist, discuss any seven strategies you would take to prevent/control the cutaneous mycoses. (7 marks)