



**NATIONAL OPEN UNIVERSITY OF NIGERIA**  
**Plot 91, Cadastral Zone, Nnamdi Azikiwe Expressway, Jabi - Abuja**  
**Faculty of Science**

**DEPARTMENT OF BIOLOGICAL SCIENCES**

**2024\_2 EXAMINATION**

**COURSE CODE: BIO 311**

**COURSE TITLE: MYCOLOGY**

**CREDIT: 2 Units**

**TIME ALLOWED: 2 Hours**

**Instructions:** Attempt question number One (1) and any other TWO (2) questions. Question number one (1) carries (30) marks, while the other questions carry (20) marks each

1 (a) Discuss on the following fungal diseases

- i) Coccidiomycosis (8 marks)
- ii) Histoplasmosis (8 marks)
- iii) Cryptococcosis (8 marks)

(b) Give the endings for the followings as they relate to fungi

Division	
Subdivision	
Classes	
Subclasses	
Order	
Families	

(4 marks)

c) Mention the structures in fungi which produce the following asexual spores:

- i) Sporangiospores ( $\frac{1}{2}$  mark)
- ii) Conidiospores ( $\frac{1}{2}$  mark)
- iii) Basidiospores ( $\frac{1}{2}$  mark)
- iv) Ascospores ( $\frac{1}{2}$  mark)

2.(a) Explain superficial infections in fungi (4 marks)

(b) Write on ringworm infection as caused by fungi (10 marks)

(c) List the drugs that are effective in the treatment of ringworm infections (6 marks)

3. (a) Explain the processes involved in production of wine using yeast. (16 marks)

(b) Describe Aspergilloma infection as caused by fungi (4 marks)

4 (a) Discuss on the class Chytridiomycetes under the followings:

- (i) Morphology (6 marks)
- (ii) Habitat (2 marks)
- (ii) Somatic structure. (8 marks)

- (b) Describe concisely the fruiting bodies of Ascomycetes and Basidiomycetes (4 marks)
- 5 (a) Discuss in details systemic candidiasis (8 marks)
- (b) Give short notes on the followings:
  - (i) Saccharification (4 mark)
  - (ii) Blastomycosis (8 marks)