

BOWEN UNIVERSITY IWO
COLLEGE OF AGRICULTURE, ENGINEERING AND SCIENCE
MICROBIOLOGY PROGRAMME
2022/2023 FIRST SEMESTER EXAMINATION
MCB 313: MYCOLOGY

Instructions: Answer question ONE and any two others.

Time: 2h 15 min

- 1 a. Briefly describe an experiment you would employ to isolate a **named** fungus from an infected mango (*Mangifera indica*). **(10 marks)**
b. (i) List the precautions to be taken while carrying out the experiment in (a) above.
(ii) Make distinctive diagrams of the following;
• Ascus containing ascospores
• Holobasidia and phragmobasidia bearing basidiospores **(10 marks)**
c. Mention the five major phyla of the kingdom of fungi, Give one specific example for each of the five major phyla **(10marks)**
- 2 a. Discuss any 4 unique characteristics of fungi **(10 marks)**
b. In a tabular form, highlight major distinguishing characteristics of Phycomycetes? **(10 marks)**
3. Briefly comment on the following:
a Coenocytic hyphae **(5 marks)**
b Parasitic nutrition **(5 marks)**
c Spore dispersal by water **(5 marks)**
d Mycelial fragmentation **(5 marks)**
- 4 a. Discuss the economic significance of the Zygomycetes group of fungi **(10 marks)**
b. List five general characteristics of slime moulds **(10 marks)**
- 5 a. Describe (i) the indirect development of ascus
(ii) the economic importance of *Aspergillus* spp. **(10 marks)**
b. Write **short** notes on the following:
i) Trichogyne ii) Gametangia iii) Basipetal
iv) Dikaryon v) Cleistothecium **(10 marks)**