



ELIZADE UNIVERSITY, ILARA-MOKIN, ONDO STATE, NIGERIA

FACULTY OF BASIC & APPLIED SCIENCES  
DEPARTMENT OF BIOLOGICAL SCIENCES  
SECOND SEMESTER EXAMINATION  
2016/2017 ACADEMIC SESSION

COURSE CODE: MCB 410

COURSE TITLE: AGRICULTURAL MICROBIOLOGY

DURATION: 2HOURS

HOD'S SIGNATURE

NAME:.....MAT.No:.....

INSTRUCTIONS: ANSWER ALL QUESTIONS IN SECTION A AND TWO (2) QUESTIONS FROM SECTION B.

## SECTION A

- 1) Pathogens are mainly disease causing microorganisms and they are found in large quantities on farms.
  - a) What are the main types and examples of these microorganisms?
  - b) Arrange these pathogenic microorganisms listed in their order of virulence and ease of control.
  - c) Highlight with relevant examples the types of microbial insecticides used in agriculture.
- 2) (a) Differentiate between biological control and chemical control of pathogens.
  - (b) Briefly describe the requirements of successful bio-control system in combating pathogens.
  - (c) Describe the actions of *Trichoderma spp.* when used as bio-control agent. In a tabular form compare air sterilization with chemical sterilization

## SECTION B

- 1) (a) Describe in details a viral disease of either soybean or cocoa swollen shown by infected plants or crops.
  - (b) Explain any six major disease symptoms of shown by infected plants or crops.
- 2) (a) Discuss the bud rot bacterial disease of oil palm.
  - (b) Explain any four (4) modes of entry of pathogens into plants and any two (2) mechanisms of disease resistance by plants.
- 3) (a) Explain the fungal disease 'bud necrosis of groundnut'.
  - (b) List and discuss any six (6) control measures of plant diseases.