



(Knowledge for Development)

KIBABII UNIVERSITY
UNIVERSITY EXAMINATIONS
2020/2021 ACADEMIC YEAR

THIRD YEAR 2ND SEMESTER
MAIN EXAMINATION

FOR THE DEGREE OF BACHELOR OF SCIENCE AGRICULTURE
EDUCATION AND EXTENSION

COURSE CODE: ACR 324
COURSE TITLE: CROP PROTECTION

DATE: 5TH OCTOBER 2021

TIME: 2 – 4 PM

INSTRUCTIONS TO CANDIDATES

Answer Question ONE and any other TWO Questions.

TIME: 2 Hours

This paper consists of 2 printed pages. Please Turn Over



KIBU observes ZERO tolerance to examination cheating

Q1. a) Why are Insects described as the most successful form of life on earth (5mks)

- b) Define the following terms
 - i) Disease forecasting (2marks)
 - ii) Economic injury level (2 marks)
 - iii) Economic threshold level (2 marks)
- c) List 3 categories of insect pests based on degree of damage, frequency of their occurrence and behavioural characteristics (3 marks)
- d) List 4 types of Plant Pathogens(4 marks)
- e) Name Three components that necessitate a disease to occur in any plant system(3 marks)
- f) Which distinct characteristic features make weeds unique? (3marks)
- g) List the insect pests of major economic in Maize production systems(2 marks)
- h) List 4 distinguishing characteristics of the class INSECTA (4 marks)

Q2. a) In order for a disease to develop, a pathogen must be present and successfully invade plant host tissues and cells. Outline the chain of events involved in disease development

(12 marks)

- b) Insect pests are considered as **“a foe and a friend”** in regard to crop protection and human existence. Discuss (8 marks)

Q3. a) Briefly explain insect physiology (2 marks)

- b) List and explain the process of disease forecasting (8 marks)
- c) List and explain briefly the classification of herbicides (10 marks)

Q4. a) Describe methods of insect pest control (10 marks)

- b) Describe principles of integrated pest management (10 marks)

Q5. a) List five abiotic agents that aid disease development in crops (5 marks)

- b) Write brief notes covering etiology, host range, symptomatology, epidemiology and control of bacterial wilt of potato). (15marks)