



*"Investing in Africa's Future"*  
**COLLEGE OF HEALTH, AGRICULTURE & NATURAL SCIENCES**

**NREM 506 RESEARCH METHODS**

**END OF SECOND SEMESTER EXAMINATIONS**

**MAY 2023**

**LECTURER: PROF L. DUBE**

**DURATION: 3 HOURS**

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***INSTRUCTIONS***

Do not write your name on the answer sheet

Use Answer Sheets Provided

Begin your answer for Each Question on a New Page

Credit is Given for Neat Presentation



## INSTRUCTIONS TO CANDIDATES

Answer QUESTION 1 and any other three from the remaining questions.

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### Question 1

Read the following case and answer the questions following it.

#### **Pests destroy up to 40 percent of global crops and cost \$220 billion of losses annually**

Due to the impact of climate change, plant pests that ravage economically important crops are becoming more destructive and posing an increasing threat to food security and the environment. FAO estimates that annually up to 40 percent of global crop production is lost to pests. Each year, plant diseases cost the global economy over \$220 billion, and invasive insects at least \$70 billion. Climate change-induced pest dispersal and intensity threaten food security as a whole. Small holders, people whose livelihoods rely on plant health and those who live in countries beset by food insecurity are especially vulnerable to these risks. Invasive pests are also one of the main drivers of biodiversity loss.

As an agribusiness research consultant, you have been commissioned by the Ministry of Lands, Agriculture, Fisheries, Water, Climate and Rural Development to conduct a comprehensive study to ascertain the extend of the threat caused by invasive pests to crop production in Zimbabwe.

Required:

- a) State an appropriate research title for the research. [3]
- b) Formulate the statement of the problem for the study. [4]
- c) “A research problem exists only if some conditions are met”. With reference to the research problem and the statement of the problem you provided above, highlight three salient features of a good statement of the problem. [3]
- d) Formulate three possible research objectives for the proposed study. [6]
- e) Discuss whether a positivist or pragmatist paradigm would provide the best approach for the study and justify the choice of the paradigm. [5]
- f) Develop a conceptual framework for the above problem, clearly indicating the various types of variables. [10]
- g) Identify the target population for your study and briefly describe how you would select the sample for the study. [5]



- h) Give four ethical considerations that you would bear in mind while conducting your research. [4]

### **Question 2**

Discuss any five (5) reasons why research methods skills are critical to maintaining sustainable competitive advantage and growing shareholder value in today's business environment. [20]

### **Question 3**

"The scientific community is a collection of people and a set of norms, behaviours, and attitudes that bind them together to sustain the scientific ethos". In view of the above statement, discuss the five norms of the scientific community. [20]

### **Question 4**

Despite some possible limitations and disadvantages, most decision-makers and researchers usually use the ideas generated in secondary data as a very strong foundation to primary data design and collection. Discuss any five possible limitations of secondary data. [20]

### **Question 5**

"Research is seeing through the trees whilst what is not research is merely seeing the forest". Critically evaluate this statement using business examples. [20]

