



# KIBABII UNIVERSITY

UNIVERSITY EXAMINATIONS  
2017/2018 ACADEMIC YEAR

THIRD YEAR FIRST SEMESTER  
MAIN EXAMINATIONS

FOR THE BACHELOR OF RENEWABLE ENERGY AND BIOFUELS  
TECHNOLOGY

**COURSE CODE: IET 391**

**COURSE TITLE: RESEARCH METHODS**

**DURATION: 2 HOURS**

**DATE: 16/10/ 2018 TIME: 9 – 11Am**

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## **INSTRUCTIONS TO CANDIDATES**

- Answer **QUESTION ONE** (Compulsory) and any other two (2) Questions.
- Indicate **answered questions** on the front cover.
- Start every question on a new page and make sure question's number is written on each page.

This paper consists of **3** printed pages. Please Turn Over



### **QUESTION ONE**

- a) Discuss the importance of literature review in a research proposal. (10 marks)
- b) Discuss the following terms as used in research
- i) Accessible population (4mks)
  - ii) Target population (4mks)
  - ii) Sampling error (4mks)
- c) Discuss the ethical issues that a researcher has to consider while carrying out research relating to:
- i) The respondents (4 marks)
  - ii) The team members (4 marks)

### **QUESTION TWO**

- a) Briefly explain five characteristics of scientific research. (10marks)
- b) During the last two decades, there has been a dramatic change in the business environment. The trend towards complexity has increased the risk associated with business decisions, making it more important to have a sound information base. In view of the above statement, discuss the role of research in today's organizations (10 marks)

### **QUESTION THREE**

- a) Differentiate between the following terms as used in research
- i) Reliability and Validity (3 marks)
  - ii) Pure research and applied research (2 marks)
- b) Discuss the various sampling techniques that a researcher may use to select a sample from the population giving an advantage and disadvantage for each. (15 marks)

### **QUESTION FOUR**

- a) Briefly explain five factors that should be taken into consideration by a researcher in selecting an appropriate method for data collection. (10 marks)
- b) Define the term response rate and why is it important to have a high response rate in research study. (10mks)

### **QUESTION FIVE**

- a) Discuss the reasons why it is important to write a research proposal before engaging in any field research exercise. (10 marks)
- b) Compare and contrast questionnaires and interviews as instruments of collecting primary data. (11 marks)