

W1-2-60-1-6

**JOMO KENYATTA UNIVERSITY**

**OF**

**AGRICULTURE AND TECHNOLOGY**

**UNIVERSITY EXAMINATIONS 2017/2018**

**YEAR I SEMESTER I EXAMINATION FOR THE MASTER OF SCIENCE IN BIOTECHNOLOGY**

**IBR 3120: BIOSTATISTICS AND EXPERIMENTAL DESIGN**

**DATE: DECEMBER 2017 TIME: 3 HOURS**

**INSTRUCTIONS: ANSWER ANY FOUR QUESTION**

1. Discuss how you can control effects of extraneous variables in research. [25 marks]
2. State the title and at least three specific objectives of research you intend to undertake for your theses and show examples of;
3. The expected data to be collected
4. The analyzed data. [25 marks]
5. Describe operations in data processing. [25 marks]
6. Describe the technique of analysis of variance for one way and two way classifications. [25 marks]
7. Suppose you encounter a large volume of raw data during your research, discuss how you can make the data to be read easily, analyzed and help you make generalizations. [25 marks]
8. Describe how to ensure that samples are truly representative of the population without any bias so that they may result in valid and reliable conclusions. [25 marks]