

## **BIO 304 – RESEARCH METHODS**

**INSTRUCTIONS: ANSWER THREE QUESTIONS, WITH AT LEAST ONE QUESTION FROM EACH SECTION    TIME: 2 HOURS**

### **EXAM QUESTION ON DATA ANALYSIS**

1. In order to determine the effect of treatment on plant growth, a randomized complete block design was used to allocate 4 treatments on 3 soil types. The following parameters of the plant were measured during the experiment (height, weight, and leaf area). From the above information
  - (a) Identify the Independent variable(s)
  - (b) Identify the dependent variable(s)
  - (c) Identify the confound variable(s)
  - (d) Write out the Null hypothesis (s) of this experiment
  - (e) Name a statistical test will be suitable for analysing the collected data
  
2. List 2 differences between a bar chart and histogram.