



MASENO UNIVERSITY

UNIVERSITY EXAMINATIONS 2016/2017

SECOND YEAR FIRST SEMESTER EXAMINATIONS FOR THE DEGREE OF BACHELOR OF SCIENCE WITH INFORMATION TECHNOLOGY

MAIN CAMPUS

AAG 202: INTRODUCTION TO STATISTICS

Date: 2nd December, 2016

Time: 8.30 - 11.30 am

INSTRUCTIONS:

- Answer ALL questions in SECTION A and any TWO questions in SECTION B.



AAG 202: INTRODUCTION TO STATISTICS

TIME 3.00 HRS (TOTAL MARKS 70)

INSTRUCTIONS:

Answer ALL the questions in section A and any TWO questions in section B.
Section A is 30 Marks while section B is 40 Marks.

SECTION I Answer all questions (3Marks each)

- Q1. 10 Maize inbred lines were grown in a replicated trial at Maseno and the following were the height growth for the entries in centimeters;
67,55,72,68,62,59,64,75,58,70;
- Calculate: a) the mean
b) variance for this data
 - Determine: a) the standard deviation
b) coefficient of variation for the height growth performance
- Q2. Briefly describe the circumstances that will lead a statistician to commit either a Type I or a Type II error in decision making

- Q3 Using appropriate illustrations compare skewed distribution curves with the normal distribution curve
- Q4 Distinguish between discrete and continuous variables
- Q5 Which circumstances will compel you to apply purposive sampling?
- Q6 Briefly provide an outline of the z score in analysis of data
- Q7 Discuss the use of the p-value in statistical decision making
- Q8 Which are the requisite assumptions underlying random sampling ?
- Q9 Provide an outline of the application of the X^2 test

Section II Answer any two questions (20 marks each)

- Q10. Discuss data collection methods
- Q11. Discuss simple regression and correlation in data analysis
- Q12. Discuss distribution of data in statistics