



MASENO UNIVERSITY

UNIVERSITY EXAMINATIONS 2012/2013

**FIRST YEAR SECOND SEMESTER EXAMINATIONS FOR
THE DEGREES OF BACHELOR OF ARTS IN
SOCIOLOGY & ANTHROPOLOGY WITH INFORMATION
TECHNOLOGY
(HOMA BAY CAMPUS)**

**ASO 112: INTRODUCTION TO SOCIAL
STATISTICS**

Date: 20th July, 2013

Time: 2.00 – 4.00 p.m.

ASO 112: INTRODUCTION TO SOCIAL STATISTICS
HOMABAY TOWN LEARNING CENTRE
YEAR ONE SEMESTER TWO

Answer Any **THREE** Questions.

1. From the following distribution, calculate the median, mean deviation and its coefficient. (23.3 Marks)

Age	Illness prevalence
45-50	10
40-45	15
35-40	26
30-35	30
25-30	42
20-25	31
15-20	24
10-15	15
5-10	7

2. a) From the following distribution, calculate the quartile deviation and its coefficient. (10 Marks)

Class	Frequency
0-10	7
10-20	12
20-30	18
30-40	25
40-50	16
50-60	14
60-70	8

- b) Discuss the various parts of a table. (13.3 Marks)

3. Using suitable illustrations, discuss the concepts skewness and kurtosis bringing out their various graphical representations. (23.3 Marks)

4. Calculate the standard deviation, variance and the coefficient of variation of the following distribution. (23.3 Marks)

Age	Number of persons
0-10	4
10-20	7
20-30	11
30-40	12
40-50	6
50-60	10

5. The following table gives the number of companies operating in Nyanza and Mombasa according to the profits they made. Draw in the same diagram their Lorenz curves and interpret them. (23.3 Marks)

Profits earned (\$ 000)	Number of companies	
	Nyanza	Mombasa
8	6	2
25	11	38
60	13	52
84	14	28
105	15	38
150	17	26
170	10	12
400	14	4

6. Discuss the various areas of applicability of statistics in the Kenyan society. (23.3 Marks)