FACULTY OF EDUCATION AND SOCIAL SCIENCES

DEPARTMENT OF PSYCHOLOGY, CRIMINOLOGY AND SOCIAL WORK

2013/2014 ACADEMIC YEAR   SEMESTER MAIN EXAMINATION

DIPLOMA IN CRIMINOLOGY

COURSE CODE: DCR 064

COURSE TITLE: SOCIAL STATISTICS

DATE:15TH AUGUST, 2014   **TIME:2.PM. – 4.00 P.M**

INSTRUCTIONS TO THE CANDIDATES

- **ANSWER QUESTION ONE AND ANY OTHER TWO QUESTIONS**

QUESTION ONE
a) Define the term statistics   (4 Marks)
b) Discuss the theory of statistics   (6 Marks)
c) Clearly distinguish between population and sample   (6 Marks)
d) Using clear illustrate distinguish between continuous and discrete variable (6 Marks)
e) Define the term measurement, using a clear illustration carefully distinguish between elements with a measurement (8 Marks)

QUESTION TWO
Data from a study of school status and level of discipline is a represented in the table below:

SCHOOL STATUS	LEVEL OF DISPLINE			
	EXCELLENT	GOOD	AVERAGE	POOR
National	6	2	8	4
County	4	5	3	8
Sub-county	3	7	4	6

Using a chi-square, test the hypothesis that there is no relationship between school status and level of discipline at 0.05 significant level   (20 Marks)

QUESTION THREE
a) State and explain the role of statistics in criminology   (6 Marks)

b) Explain the various forms numerical data can be classified and how these classifications affect data analysis   (14 Marks)

QUESTION FOUR
The following were there scores obtained by a form II class in a Mathematics test

49	63	59	58	44	49	51	62	37
30	49	45	52	50	42	54	32	57
41	42	56	44	46	63	44	40	50
46	53	48	37	46	53	68	66	58
36	40	56	37	66	43	40	43	51
59	42	52	46	57				

a) Make a frequency distribution table for this data   (8 Marks)

b) Make a grouped frequency distribution which should have both tally marks and frequencies for each class interval. Use class size (i) 5 and start with 30-34 as the lowest class interval. Indicate the class interval indicate also the above as well as below cumulative frequencies

(12 Marks)

QUESTION FIVE

The table below shows marks in an exam

Marks	2-4	5-7	8-10	11-13	14-16	17-19	20-22	23-25	26 - 28	29-31
Frequency										

Calculate the mean and standard deviation of the data set above   (20 Marks)

QUESTION SIX

With clear illustration, discuss the role of statistics   (20 Marks