

KABARAK



UNIVERSITY

UNIVERSITY EXAMINATIONS

2009/2010 ACADEMIC YEAR

FOR THE DEGREE OF BACHELOR OF EDUCATION ARTS

COURSE CODE: GEO 211

COURSE TITLE: QUANTITATIVE METHOD IN GEOGRAPHY

STREAM: Y2S1

DAY: WEDNESDAY

TIME: 9.00 – 11.00 A.M.

DATE: 11/08/2010

INSTRUCTIONS:

1. Answer question **ONE** and any other **TWO** questions
2. Sketch maps and diagrams should be used whenever they serve to illustrate and answer.

PLEASE TURNOVER

1. (a) What do you understand by the following terms.

- (i) Range (3Mrks)
- (ii) Mean deviation (3Mrks)
- (iii) Skewness (3Mrks)

(b) The data below show the distribution of rainfall recorded for a week in two stations.

Rainfall in mm

<u>Station A</u>	<u>Station B</u>
20	10
5	15
0	3
30	20
100	60
50	70
15	40

Using the above data;

- (i) Calculate the standard deviation for each station (12Mrks)
 - (ii) Calculate the coefficient of variation for each station? (6Mrks)
 - (iii) What do the values of coefficient of variation show about the rainfall in the two stations? (3Mrks)
2. (a) Distinguish between primary and secondary data (4Mrks)
- (b) Discuss the merits and demerits of Secondary data (16Mrks)
3. (a) A geographer studying fertility of Kenyan population collected the following data from a sample of 7541 women of child bearing age

Age at first birth	Number of Women
15-19	1754
20-24	1638
25-29	1221
30-34	1088
35-39	768
40-44	638
45-49	434

Using the above data;

(i) Calculate the mean age at first birth (8Mrks)

(ii) Calculate Median Age at first birth (8Mrks)

(b) Discuss the advantages and disadvantages of an arithmetic mean in data analysis (4Mrks)

4. Write short explanatory notes on the following

(a) Systematic sampling (10Mrks)

(b) Cluster sampling (10Mrks)

5. (a) Explain the following terms as used in statistics

(i) Significance levels (2Mrks)

(ii) Degree of freedom (2Mrks)

(iii) Parameter (2Mrks)

(iv) Hypothesis (2Mrks)

(v) Element (2Mrks)

(b) Explain the factors and procedures that are used in sample size determination (10Mrks)