



MACHAKOS UNIVERSITY

University Examinations for 2018/2019 Academic Year

SCHOOL OF HUMANITIES AND SOCIAL SCIENCES

DEPARTMENT OF SOCIAL SCIENCES

SECOND YEAR SPECIAL/SUPPLEMENTARY EXAMINATION FOR

BACHELOR OF EDUCATION (ARTS)

BACHELOR OF ARTS

AGE 200: QUANTITATIVE AND QUALITATIVE RESEARCH IN GEOGRAPHY

DATE:

TIME:

INSTRUCTIONS: Answer QUESTION ONE and any other TWO QUESTIONS

QUESTION ONE (30 MARKS)

- a) Discuss the following terms
- i) Descriptive and inferential statistics (2 marks)
 - ii) Sample and population (2 marks)
 - iii) Discrete and continuous variables (2 marks)
 - iv) Quantitative and qualitative data (4 marks)
- b) Discuss the rational of statistical data contemporary research world. (10 marks)
- c) Discuss the sources of data and collection methods (10 marks)

QUESTION TWO

The table below shows marks obtained by 100 candidates at Eastside research centre.

Class of data	15 -24	25 – 34	35 - 44	45 - 54	55 – 64	65 - 74	75- 84	85- 94
Frequency	6	14	24	14	x	10	6	4

- a) Determine the value of x. (2 marks)
- b) State the
 - i) Modal frequency (2 marks)
 - ii) Median mark (3 marks)
 - iii) Mean (4 marks)
- c) The interquantite range. (9 marks)

QUESTION THREE

- a) Briefly discuss the advantages and disadvantages of various measures of central tendency in the analysis of geographical data. (8 marks)
- b) In survey of visiting patterns by Agricultural Extension officers,81 farmers (respondents) were asked to indicate the number of such visits paid to them in three months. The results were as follows:
 3, 5 ,2 ,3, 3, 4, 1, 8, 4,2, 4 ,2 ,5, 23, 3, 3, 20 ,3,5, 6, 4, 3, 2, 2, 6 ,3, 5,4, 14 ,3 ,5, 6,3 ,4 ,2 ,4,,9 ,4, 1, 4 ,2, 4, 3 ,5 ,20,4 ,3, 5 ,7 ,3, 5 ,6, 2, 2,25 ,4 ,2, 3, 6 ,1 ,3 ,16 ,5,3, 11, 4 ,5 ,19 ,4 ,5 ,2, 2,4 ,3 ,14 ,5, 2, 1 ,4, 3 4.
 Construct,
 - i. Grouped frequency distribution. (7 marks)
 - ii. Cumulative frequency distribution. (3 marks)
 - iii. A Histogram . (5 marks)
- c) Comment on the results in b (iii) above. (2 marks)
- d) Discuss the merits and demerits of graphical representation of geographical data. (5 marks)

QUESTION FOUR

- a) Briefly explain why geographers use “samples” instead of “full populations” in Geographic research. (3 marks)
- b) With the aid of suitable illustrations, explain the following sampling techniques.
 - i. Simple random sampling (6 marks)
 - ii. Systematic sampling (5 marks)
 - iii. Stratified random sampling (6 marks)

QUESTION FIVE

- a) Why is it necessary to supplement measures of central tendency with measures of dispersion to describe a distribution fully? (4 marks)
- b) The table below shows the number of elected women officials holding positions in some counties in Rift valley province.

County	Frequency (f)
Turkana	1
West pokot	2
Samburu	3
Laikipia	3
Kajiado	4
Narok	4
Trans Nzoia	6
Nandi	10
Kericho	11
Uasin Gishu	13
Nakuru	15

Determine the following:

- i. Standard deviation (8 marks)
- ii. Pearson coefficient of skewness. (6 marks)
- iii. Comment on the results in (ii) above. (2 marks)