(Knowledge for Development)

KIBABII UNIVERSITY

UNIVERSITY SPECIAL/ SUPPLEMENTARY EXAMINATIONS

2019/2020 ACADEMIC YEAR

FIRST YEAR SECOND SEMESTER

MASTER OF EDUCATION IN CURRICULUM AND INSTRUCTION

COURSE CODE: CUT 815 **COURSE TITLE:** *RESEARCH METHODS*

DATE: 8/2/2021 **TIME:** 8:00AM --- 11:00 AM

INSTRUCTIONS TO CANDIDATES

1. Answer Question One and Any TWO other (2) Questions
2. Answer all selected questions in ONE answer booklet
3. Fill the required information in the provided spaces in the answer booklet
4. This is a three hour examination paper

TIME: 3 Hours

This Paper Consists of 2 Printed Pages. Please Turn Over.

QUESTION ONE (COMPULSORY)

a) Define data analysis (2 marks)
b) Distinguish between qualitative and quantitative data analysis (4 marks)
c) Differentiate between categorical and continuous variables giving two examples of each (8 marks)
d) Explain why mean is the most explanatory measure of central tendency in the descriptive analysis of data (4 marks)
e) Explain the circumstances when you will use each of the following forms of data analysis
   i. parametric data analysis (2 marks)
   ii. non parametric data analysis (2 marks)
f) What is a research hypothesis? (4 marks)
g) In using inferential statistics outline the steps to be followed in carrying out a test statistic (4 marks)

QUESTION TWO

The chi-square test can be used in testing univariate or bivariate data to measure differences in the given data items. Use chi-square to carry out tests in the following two cases and discuss your results in each case at $\alpha = 0.05$ level of significance. A simple survey was carried out in Kibabii University to determine the enrollment of a sample of students by gender in four different programmes.

The table below presents the distribution of the respondents. (10 marks)

Gender	Education	Science	Business	Computing
Males	12	14	13	12
Females	18	8	7	16

QUESTION THREE

Find the mean, the mode and the median for the following data (15 marks)

50, 55, 65, 75, 85, 65, 70, 55, 65, 80, 70, 65, 75, 65, 70, 65, 55, 75, 80, 75

QUESTION FOUR

The frequency distribution table below shows the performance of students in two subjects

Determine the mean scores and the standard deviation for each subject and comment on your results (15 Marks)

Maths	66	65	80	84	68	72	66	64	55	60
English	64	75	72	86	66	65	78	65	55	64