



UNIVERSITY EXAMINATIONS

2ND SEMESTER 2023/2024 ACADEMIC YEAR

**SECOND YEAR EXAMINATION FOR THE DEGREE OF
BACHELOR OF PSYCHOLOGY**

**EPSC 221: STATISTICS AND RESEARCH METHODS IN
EDUCATION**

STREAM: R

TIME: 2 HRS

DAY: FRIDAY (2.30-4.30PM)

DATE: 12/4/24

THIS QUESTION PAPER CONSISTS OF THREE (3) PAGES

PLEASE DO NOT OPEN UNTIL THE INVIGILATOR SAYS SO.



INSTRUCTIONS: Answer Question **ONE (compulsory)** and any other **TWO** Questions.

QUESTION ONE (30 MARKS)

a) Explain four ethical issues you would put into account to safeguard the respondents in a research. (8mks)

b) Use the data given below to answer the question that follow,

68	53	62	61	58	58	57	56	54	54	46	52	52	51	51	50	49	-
48	47	43	46	45	45	45	45	44	43	43	63	42	42	41	41	41	-
40	39	39	36	38	37	37	37	36	35	33	32	30	26	26	21.	-	-

- Prepare a frequency Distribution showing the class stated and real limits, cumulative frequencies, and midpoints. Use $i=10$ (6mks)
- Find the range, mean and median (6mks)
- Prepare a histogram for the above data (4mks)
- Calculate the variance and standard deviation for the grouped data (show all your working) (6mks)

SECTION B: Choose any **TWO** questions in this section

QUESTION TWO (20 MARKS)

- What is the relevance of research to education? (6mks)
- Describe the main sections of chapter three of your research proposal (6mks)
- Prepare a stem and leaf display for the data in question 1b (8mks)

QUESTION THREE (20 MARKS)

- a) Using an example differentiate between an independent and dependent variable (4mks)
- b) Explain the criteria of selecting a suitable research problem? (6mks)
- c) Describe questionnaire as a tool for data collection. (10mks)

QUESTION FOUR (20 MARKS)

- a) Explain the importance of carrying out Literature Review in the research process. (12mks)
- b) Describe the following sampling techniques using relevant examples from education:
 - i. Simple random sampling (2mks)
 - ii. Stratified sampling. (2mks)
 - iii. Convenience sampling. (2mks)
 - iv. Snowball sampling. (2mks)

