



ZIMBABWE EZEKIEL GUTI UNIVERSITY

FACULTY OF HUMANITIES, EDUCATION AND SOCIAL SCIENCES

DEPARTMENT OF EDUCATION AND LEADERSHIP DEVELOPMENT

EXAMINATION PAPER

COURSE CODE : EPR 101 & 201
COURSE TITLE : Research Methods and Statistics
DURATION : 3 Hours
DATE :

INSTRUCTIONS TO CANDIDATES:

1. Answer any **THREE** questions only, **but do not answer more than two questions from one section.**
2. Start each question on a new page of your answer sheet.

SECTION A

1. Examine any **four** ethical principles which an educational researcher should consider (25)
2. The quantitative approach is more appropriate for studying human behaviour than the qualitative approach. Discuss. (25)
3. Assess the effectiveness of any four probability sampling methods (25)

SECTION B

4. The following table shows the marks of 10 candidates in Physics and Mathematics.

Physics (X)	18	20	30	40	46	54	60	80	88	92
Maths (Y)	40	54	60	54	62	68	80	66	80	100

- a) Find the variance of Maths scores (5)
- b) Calculate the Pearson's Product Moment Correlation Coefficient of the scores (16)
- c) Comment on the strength of the correlation (2)
- d) State any **two** measures of central tendency (2)

5. The table shows the scores of eight students in English (X) and Maths (Y)

X	15	16	16	14	17	15	15	18	15	15	16	17	14
Y	15	8	15	5	6	8	6	5	4	8	4	5	3

- a) Calculate standard deviation of English scores (5)
- b) Find the Spearman's rank order correlation co-efficient (16)
- c) Comment on the strength of the correlation (2)
- d) State one difference between inferential and descriptive statistics (2)

6. The table shows the measures of self-concept (X) and achievement (Y) for ten subjects.

X	65	50	43	9	12	35	24	20	16	54
Y	42	54	60	25	30	18	48	35	22	38

- i) Find the median of Y (1)
- ii) Find the z score of 35 in the X distribution (6)
- iii) Calculate the Pearson product moment correlation co-efficient. (14)
- iv) Comment on the strength of the correlation (2)
- v) Make **one** distinction between an independent and dependent variable. (2)

END OF EXAMINATION