



KISII UNIVERSITY
UNIVERSITY EXAMINATIONS

SPECIAL EXAMINATIONS
SECOND YEAR EXAMINATION FOR THE AWARD OF THE
DEGREE OF BACHELOR OF EDUCATION (ECDE)
SECOND SEMESTER, 2021/2022
(FEBRUARY - JUNE, 2022)

EPSC 224: RESEARCH METHODS IN EDUCATION

STREAM: Y2 S1

TIME: 2 HOURS

DAY: MONDAY, 11:30 – 1:30 P.M.

DATE: 25/07/2022

INSTRUCTIONS:

- 1. Do not write anything on this question paper.***
- 2. Answer Question ONE [Compulsory] and any other TWO Questions.***

QUESTION ONE

- Why is it important that personal data about research participants are kept within secure and confidential records? (5 marks)
- Conducting interviews is one of the ways of data collection. Explain five drawbacks of using this method in research (5 marks)
- Explain five reasons why a researcher needs to review the existing literature (5 marks)
- Using examples, differentiate between qualitative and quantitative research designs (10 marks)

QUESTION TWO

a) A researcher analyzes the KCSE results over a five-year period and finds that male students on average score higher in mathematics and female students on average score higher in languages. She concludes that these observed differences in test performance are due to genetic factors. Explain how extraneous variables could offer an alternative explanation for the observed differences exams (10 marks)

b) In research, one needs to be use scientific methods of inquiry for the results to be valid. Explain what it means to use scientific procedures (5 marks)

QUESTION THREE

a) Explain the meaning of the following concepts

- i. Variable
- ii. Population
- iii. Sample
- iv. Statistic
- v. Parameter (10 marks)

b) Use the following information to answer the following questions.

9, 5, 1, 4, 1, 6, 2, 7, 3, 4, 5, 7, 8, 1, 10, 18, 9, 5, 1, 3, 2, 6

- i. Find the median for this data set
- ii. What is the first quartile for this data set?
- iii. Calculate the mean for the data set
- iv. What is the third quartile for this data set?
- v. What is the mode for the data set? (5 marks)

QUESTION FOUR

a) Using examples, explain *any five* differences between qualitative and quantitative research (10 marks)

b) Explain five reasons why a researcher needs to review the existing literature when conducting research (5 marks)

QUESTION FIVE

a) A health club is interested in knowing how many times a typical member uses the club in a week. They decide to ask every tenth customer on a specified day to complete a short survey including information about how many times they have visited the club in the past week. Giving reasons, identify what kind of a sampling design this is (5 marks)

b) Substance and drug abuse among university students has become a major global concern and a serious challenge. Despite being aware of their harmful outcomes, many students continue to abuse them. The reasons behind their use include curiosity, peer pressure, prescription drugs originally intended to target pain relief but turned into recreational use, use as part of religious practices, as a means of obtaining creative inspiration among others. Apart from the poor academic performance, there is also the problem of a weakened immune system, seizures, stroke, mental confusion, brain damage, lung disease, problems with memory, attention and decision-making among many others. Assume you are hired by the Kisii University guidance and counselling department to conduct a research focusing on this problem;

a) Giving reasons, explain the research design(s) you will use (4 marks)

b) Identify any THREE ethical issues that you will be required to take care of when collecting data (6 marks)