# MACHAKOS UNIVERSITY 

University Examinations for 2020/2021 Academic Year

SCHOOL OF EDUCATION

## DEPARTMENT OF EDUCATIONAL PSYCHOLOGY \& SPECIAL NEEDS EDUCATION FOURTH YEAR FIRST SEMESTER EXAMINATION FOR BACHELOR OF EDUCATION (SPECIAL NEEDS EDUCATION) ESN 420: RESEARCH PROJECT IN SPECIAL NEEDS EDUCATION

DATE: 12/8/2021
TIME: 11.00-1.00 PM
INSTRUCTIONS
ANSWER QUESTION ONE AND ANY OTHER TWO QUESTIONS

## QUESTION ONE (30 MARKS)

a) Describe what is a statement of the problem in research
b) Differentiate between a research objective and a research question
c) Discuss the difference between quantitative approach and qualitative approach in research.
d) State four sources of research problem
e) Explain what is a bar graph
f) Explain what plagrarism in academic writing is
g) Describe the meaning of a sample size in research

QUESTION TWO (20 MARKS)
a) State four characteristics of a good research problem
b) Discuss challenges one is likely to face in identifying a research problem

QUESTION THREE (20 MARKS)
Discuss four probability sampling techniques

## QUESTION FOUR (20 MARKS)

Ouma gave a test to 30 learners in class in numberwork and the scores were as follows

| 9 | 18 | 15 | 13 | 14 | 15 | 17 | 16 | 1 | 15 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 14 | 11 | 13 | 10 | 13 | 12 | 12 | 15 | 14 | 14 |
| 16 | 10 | 14 | 15 | 16 | 12 | 10 | 17 | 14 | 10 |

a) Prepare the above data in tallies and frequency distribution
b) Prepare the scores in grouped frequency with the interval range of 5
c) Draw a histogram to represent the performance in the number work.

## QUESTION FIVE (20 MARKS)

A class of sign language did an examination and got the following scores

| 34 | 6 | 32 | 40 | 12 | 6 | 10 | 16 | 30 | 20 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 10 | 32 | 36 | 16 | 20 | 40 | 12 | 28 | 20 | 30 |
| 36 | 16 | 20 | 12 | 28 | 24 | 10 | 24 | 30 | 20 |

a) Calculate the mean of the scores (5 marks)
b) Identify the median of the scores
c) State the mode in the scores
d) Construct a pie chart to present the scores

