## UNIVERSITY OF SWAZILAND



## FACULTY OF EDUCATION

## DEPARTMENT OF EDUCATIONAL FOUNDATIONS AND MANAGEMENT 2019

## FIRST SEMESTER RE-SIT EXAMINATION PAPER

JANUARY, 2019

TITLE OF PAPER:

COURSE CODE:

TIME ALLOWED:

INSTRUCTIONS:

TOTAL MARKS:

INTRODUCTION TO EDUCATIONAL RESEARCH

EFM 515

Three (3) hours

Answer Two questions from each section

100 MARKS

## SECTION A

Instructions: Answer any two questions in this section.

## Question 1

(a) Use the American Psychological Association (APA) sixth edition to illustrate how you would write the end of text reference list for the following:
(i) A book
(ii) An article or chapter in an edited book
(iii) An article in a peer reviewed journal that has three authors
(iv) Technical and research reports (often with corporate authors)
(v) Website with no author or date of publication
(10 marks)
(b) Discuss the five major components of a research report.
[Total 25 marks]

## Question 2

(a) Develop an argument either for or against the statement, 'The most important step in the research process is the identification of the research problem'. ( $\mathbf{1 0}$ marks)
(b) Discuss the assertion that, 'questions about variables are best addressed by quantitative research methods while research questions about processes are best addressed by qualitative methods'.
marks)
[Total 25 marks]

## Question 3

Using appropriate examples, discuss the logistical and conceptual differences between probability and non-probability sampling.

## SECTION B

Instructions: Answer any two questions in this section.

## Question 4

Two lecturers conducted an interview for prospective students and awarded those marks as follows.

Table 1 interview marks for 10 students

| Student | A | B | C | D | E | F | G | H | I | J |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Lecturer x | 50 | 48 | 52 | 70 | 70 | 72 | 55 | 70 | 80 | 73 |
| Lecturer y | 45 | 44 | 60 | 66 | 80 | 60 | 40 | 68 | 84 | 72 |

a) Using information in Table 1 above calculate Spearman's rank order correlation coefficient and comment on it.
b) Find the mode of lecturer X .
c) Calculate the inclusive range of lecturer Y.

## Question 5

Table below shows the marks which obtained by 10 pupils in Mathematics and English examinations.

Table 2 Mathematics and English scores

| Pupil | A | B | C | D | E | F | G | H | I | J |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Maths | 62 | 71 | 72 | 62 | 74 | 83 | 54 | 78 | 67 | 57 |
| English | 63 | 61 | 51 | 62 | 58 | 48 | 75 | 57 | 60 | 75 |

a) Calculate the mean of Mathematics marks.
b) Calculate the range of English marks.
c) Calculate the Variance of English marks.
d) Given that the Standard deviation of Mathematics is 9.29 determine the subject in which pupil D did better.

## Question 6

A Form 5 teacher wanted to find out if there is a difference between the academic performance of pupils in Geography and History. The pupils were given tests and scores were as follows:

Table 3 Geography and History scores

| Pupil | A | B | C | D | E | F | G | H | I | J |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Geography | 60 | 58 | 75 | 36 | 50 | 61 | 85 | 70 | 77 | 63 |
| History | 72 | 65 | 70 | 40 | 50 | 64 | 90 | 72 | 70 | 60 |

Carry out a t-test at $10 \%$ significance level to determine if there is a difference between the academic performance of form 5 pupils in Geography and History.

