

# **UNIVERSITY EXAMINATIONS**

# FIRST YEAR EXAMINATION FOR THE AWARD OF THE POSTGRADUATE DIPLOMA IN EDUCATION FIRST SEMESTER, 2021/2022 (FEBRUARY - JUNE, 2022)

PGDE 704: STATISTICAL METHODS IN EDUCATION

STREAM: Y1 S1 TIME: 2 HOURS

DAY: MONDAY, 9:00 - 11:00 A.M. DATE: 16/05/2022

#### **INSTRUCTIONS**

1. Do not write anything on this question paper.

Answer Question ONE [Compulsory] and any other TWO Questions.

# **QUESTION ONE**

- a) Distinguish between;
  - i. Descriptive and inferential statistics
  - ii. Population and sample
  - iii. Parameters and statistics
  - iv. Intervening and moderating variables (8 marks)
- b) Highlight six reasons why researchers conduct educational research

(12marks)

c) Outline the typical stages in research

(10 marks)

#### **QUESTION TWO**

- a) Using examples, discuss five reasons why thorough literature review should be undertaken in educational research. (10 marks)
- b) Briefly explain the steps followed when testing hypothesis. (5 marks)

# **QUESTION THREE**

a) Fifty students in class were asked to indicate the number of books each had read in a particular year. The results are shown in the following frequency distribution table

No. of books 0 1 2 3 4 5 6 7 8

No. of students 5 5 6 9 11 7 4 2 1

# Calculate;

- i. Mean Number of books per students
- ii. Range
- iii. Standard deviation (10 marks)
- b) Explain the rationale of pre-testing a questionnaire in research. (5 marks)

# **QUESTION FOUR**

- a) Using examples, critically explain the commonly used sampling techniques (10 marks)
- b) Give advantages of one of the sampling techniques mentioned above (5 marks)

# **QUESTION FIVE**

- a) Discuss four types of research design studied in this course (5 marks)
- b) Explain five features of a good research design (10 marks)