"Investing in Africa's Future"

COLLEGE OF SOCIAL SCIENCES, THEOLOGY, HUMANITIES AND EDUCATION

COURSE CODE NHPS 148 COURSE TITLE STATISTICS IN PSYCHOLOGY

END OF SECOND SEMESTER EXAMINATIONS

MAY 2020

LECTURER: MRS MADZIWA

DURATION: WITHIN 48 HOURS

INSTRUCTIONS

1. Do NOT write your name on the answer sheet.
2. Answer One question from the Three questions.
3. Begin your answer for each part of the question on a new page e.g. a, b, and c).
4. Each question is worth a total of 60 marks.
5. Credit is given for neat, well-written and lucid work.

Question 1

The weights of 40 students measured to the nearest kilogram are as follows

79	66	69	79	76	81	77	74	82	80
78	64	80	71	87	69	75	74	77	93
73	72	74	80	77	93	64	84	88	86
72	81	83	61	90	77	69	68	75	76

a) Calculate the mean, median, range, variance and standard deviation for the whole data set (20 marks)

b) Construct a histogram and frequency polygon curve for the data set (20 marks)

c) Examine why there are variations among learners of the same age does it affect their cognition or participation in sport and clubs in school. (20 marks)

Question 2

a) The following data shows Maths marks for 10 students in a special needs class they attained when they were placed and one year after calculate the appropriate correlation coefficient to establish the strength of the correlation between the two sets of scores. Prepare a scatter plot as well (30 marks)

On placement	34	28	29	23	20	25	20	19	26
One year after	43	37	34	31	25	30	28	25	30

b) Why are parents skeptical about their children being placed in special class is their anxiety/worry justified. What should be done by schools and psychologists to reduce this (20 marks)

c) If you were asked to come up with a recommendation to ministry of education about under-performing learners besides special class what would they be? (10 marks)

Question 3

Six people were put on a special exercise program for 12 weeks to lose weight. The figures below show the weights of six people before and after the program

Before	90	97.5	88.5	110.5	104	99.5
After	91.5	93.5	80.5	102	98.5	94.7

a) Establish whether there is a significant difference before and after by calculating the appropriate t test at 0.05 significance level. (40 marks)
b) Examine why affluent/elite go to gym more than the ordinary citizen. Does it mean the ordinary citizen is missing out by not attending? Discuss (20 marks)