UNIVERSITY OF SWAZILAND

FACULTY OF SOCIAL SCIENCES

DEPARTMENT OF SOCIOLOGY AND SOCIAL WORK

FINAL EXAMINATION PAPER MAY 2018

TITLE OF PAPER:	QUANTITATIVE SOCIAL RESEARCH METHODS
COURSE CODE:	SOC 312
TIME ALLOWED:	TWO (2) HOURS

INSTRUCTIONS:

(1) Question No. 1 in Section A is Compulsory
(2) Question 1 Carry 40 Marks
(3) Answer any two (2) questions in Section B
(4) Total Marks 100
(5) You are allowed to use a calculator

THIS PAPER MUST NOT BE OPENED UNTIL PERMISSION HAS BEEN GRANTED BY THE INVIGILATOR

SECTION A

Q.1 (i) Read this research study and answer the questions that follow. (10 marks)

100 alcoholics are divided into three groups. The groups are based on the amount of alcohol they drink each day. Group 1 has 2 glasses of wine or less, Group 2 has 3 to 6 glasses of wine, and Group 3 has more than 6 glasses of wine a day. Each group then takes part in a programme to help them to stop drinking alcohol. After six months of participating in the programme, the number of drinks that participants in each group drink in a day is counted and compared with the number of drinks that they had per day before the programme started.

In this study, identify the following:

(a) the variables being studied

(b) the independent and dependent variables

(c) whether each variable is discrete or continuous

(ii) Indicate the level of measurement used in the following cases: (8 marks)

(a) Gender Male (1) Female (2)

(b) Age 20, 21, 22, etc.

(c) Hours worked last week in number of hours and minutes

(d) Job performance rating as poor, fair, average, good, very good

(e) Monthly salary of maintenance staff at uniswa

(f) Rating of customer services in standard bank

(g) Models of cars in an automobile showroom

(h) Number of vehicles owned by academic staff

(iii) Define the following: (8 marks)

(a) Hypothesis

(b) Inferential statistics

(c) Normal distribution

(d) A statistic

(iv) Explain the various steps involved in designing a statistical study. (6 marks)

(v) Discuss the merits and demerits of the three measures of central tendency.(8 marks)

SECTION B Answer any two (2) Questions.

Q. 2 Scores on a test are normally distributed. For the age group 19 – 30 years the mean is 60 and the standard deviation is 10. For the age group 31 – 60 years, the mean is 48 and standard deviation is 12.

(a) Nomvula who is 21 years scores 90 on a test. Express her score in a standard score and determine her relative standing in the distribution (percentile rank).

(b) Nomvula's sister Nokthula is 27 years and has a percentile rank of 80. How high does she score in relation to her age group?

(c) Nomvula's mother is 60 years old and scores 36. What percentage of her age group has scored less than Nomvula's mother?

(d) Nomvula's friend, Siphiwe is 22 years old and scores 75 on a test. What percentage of her age group has scored more than Siphiwe?

(30 marks)

Q. 3 A personnel manager of a company is interested in finding out whether absenteeism is greater in one day of the week than on another day. Her records for the year 2016 showed the following sample distribution.

DAYS OF THE WEEK	NUMBER OF ABSENTEES
Mondays	28
Tuesdays	19
Wednesdays	14
Thursdays	17
Fridays	22

Test whether the absences are uniformly distributed over the week. Use a level of significance of 0.05 and show the steps involved in hypothesis testing.

(30 marks)

Q. 4 Calculate the Karl Pearson's Product-moment coefficient of correlation for the following data. Add another score pair of 12 and 8 and calculate the Rank Order Correlation. Interpret your results. (30 marks)

X	5	8	9	7	6	1
Y	3	7	8	8	5	9

Q. 5 Particulars regarding income of two villages are given below:

	Village Y	Village Z
Number of people	600	500
Average income (in E)	175	186
Variance of income (in E)	100	81

(a) What is the total income of both villages put together?

(b) In which village is the variation in income greater?

(c) What is the average income of people in Y and Z villages put together?

(d) What is the combined standard deviation of the villages Y and Z put together?

(30 marks)

Q. 6 Discuss the advantages and disadvantages of structured versus unstructured survey procedures. (30 marks)