UNIVERSITY OF ESWATINI

MAIN EXAMINATION PAPER 2019

TITLE OF PAPER:	RESEARCH METHODS
COURSE CODE:	ST 332
TIME ALLOCATED:	2 (TWO) HOURS
INSTRUCTION:	ANSWER ANY 4 (FOUR) QUESTIONS OF YOUR CHOICE. ALL QUESTIONS CARRY THE MARKS AS INDICATED WITHIN THE PARENTHESIS

THIS PAPER IS NOT TO BE OPENED UNTIL PERMISSION HAS BEEN GRANTED BY THE INVIGILATOR.

QUESTION ONE [20 MARKS]

a. **Psychologists used the self-report method to investigate gambling behaviour. They placed an advert in a local newspaper asking for men and women aged 16 to 50 to apply. Those who replied were sent a questionnaire in the post consisting of a number of open and closed questions. For example:**

Q. Give reasons why you gamble

Q. Which of the following gambling activities do you engage in ?:

□ national lottery □ fruit machines □ poker □ horse racing □ football

i. Identify which of the above questions is a closed question and explain why. (2)

ii. Suggest one other closed question that could be used in this study.(2)

iii. Give 2 strengths of the sampling method used in this study. (2)

iv. Name and describe and alternative sampling method for this study. (3)

b. **Emotions are strange. Sometimes people enjoy feeling sad! To investigate this a psychologist conducted a correlation study assessing how people felt after watching a sad film. Each person was asked to rate on a 20-point scale how much they enjoyed the film (1 = not very much, 20 = very much) and how sad it made them feel (1 = not very sad, 20 = very sad). The findings from the study are presented in the table below.**

Participant	Rating of how much the film was enjoyed	Rating of how sad the film made the participant feel
1	16	18
2	5	6
3	10	12
4	12	10
5	2	2
6	13	15
7	4	19
8	6	8
9	9	9
10	7	3

i. Outline two findings from the data in Table (2)

ii. Sketch an appropriately labelled scatter graph displaying the results of this study.(4)

iii. Evaluate the reliability and validity of the way in which the psychologist measured how sad the film made people feel. (3)

iv. Explain what a positive correlation is in this study.(2)

QUESTION TWO [20 MARKS]

a) **Identify the type of measurement scale — nominal, ordinal, interval, or ratio, suggested by each statement:** (5 Marks)

i. John finished the math test in 35 minutes, whereas Jack finished the same test in 25 minutes.
ii. Jack speaks French, but John does not.
iii. Jack is taller than John.
iv. John is 6 feet 2 inches tall.
v. John's IQ is 120, whereas Jack's IQ is 110.

b) **Consider the following characteristics of a research study. Indicate whether each one is most likely (1) quantitative research or (2) qualitative research.** (5 Marks)

i. Researcher is objective and detached from participants
ii. Develops hypotheses after data have been collected
iii. Uses induction to analyze data
iv. Uses large representative samples of individuals
v. Uses narrative description

c) **Which of the following are probability samples? Which are nonprobability samples?** (7 Marks)

i. Random sample
ii. Convenience sample
iii. Cluster sample
iv. Stratified sample
v. Purposive sample
vi. Quota sample
vii. Systematic sample

d) What is the difference between random sampling and random assignment? (2)
e) Do the laws of probability apply in both? (1)

QUESTION THREE [20 MARKS]

a) List the five major sources of knowledge. Comment on one strength and weakness of each source. (16)

b) Match the term on the left with the definition on the right. (4)

i. Universal determinism	a. Proceeding from general to specific knowledge through logical argument
ii. Inductive reasoning	b. Deriving general conclusions through direct observation
iii. Deductive reasoning	c. A statement describing relationships among variables that is tentatively assumed to be true
iv. Hypothesis	d. The assumption that all natural phenomenal have antecedent factors

QUESTION FOUR [20 MARKS]

a) Several methods can be used to gathering information about a situation, person, Problem or phenomenon. The choice of a method depends upon the purpose of the study, the resources available and the skills of the researcher. In selecting a method of data collection, the socioeconomic-demographic characteristics of the study population play an important role. If possible, it is helpful to know the study population's interest in, and attitude towards, participation in the study. Discuss the following effective and commonly used methods of data collection:

i. Observation (3)
ii. The interview (3)
iii. The Schedule (3)
iv. The Questionnaire (3)

b) State 8 essentials of a good Questionnaire. (8)

QUESTION FIVE [20 MARKS]

a) Discuss the main types of probability sampling methods and explain their strengths and weaknesses. (10)

b) Explain what is meant by a *quota sample*, a (linear) *systematic random sample* and a *two-stage cluster sample*. Are these equal probability selection methods? Why or why not? (5)

c) In a district containing 4000 houses, the percentage of homes owned by the occupier, thought to be between 45% and 65%, is to be estimated with a standard error of not more than 2%. From the same survey, the percentage of households running two (or more) cars, thought to lie between 5% and 10%, is to be estimated with a standard error of not more than 1%. How large a sample is necessary to satisfy both aims? (5)

END OF EXAMINATION