

UNIVERSITY OF SWAZILAND
FACULTY OF SOCIAL SCIENCES
DEPARTMENT OF SOCIOLOGY AND SOCIAL WORK

RE-SIT EXAMINATION PAPER JULY 2018

**TITLE OF PAPER: QUANTITATIVE SOCIAL
RESEARCH METHODS**

COURSE CODE: SOC 312

TIME ALLOWED: TWO (2) HOURS

INSTRUCTIONS:

- (1) Answer any three (3) questions**
- (2) All questions carry equal marks**
- (3) Total Marks 100**
- (4) You are allowed to use a calculator**

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

Q. 1 Indicate the type of sample most appropriate for each of the following research studies, and state the rationale for your choice.

- (i) A study of the career plans of Sociology major at your university.
- (ii) An in-depth study of people with disabilities in Mbabane to determine their social and psychological characteristics.
- (iii) A national survey of television viewers to determine their liking for programmes shown on Swazi TV.
- (iv) A study to ascertain the quality of maize produced in Swaziland.

Q. 2 Explain the following:

- (a) Hypothesis
- (b) Inferential statistics
- (c) Normal distribution
- (d) A statistic

Q. 3 The results of a random sample of patients with obsessive-compulsive-disorder treated with a drug or placebo are shown below:

<u>Result</u>	<u>Treatment</u>	
	<u>Drug</u>	<u>Placebo</u>
Improvement	39	25
No Change	54	70

At a 0.05 level of significance, can you conclude that the treatment is related to the result? On the basis of these results, would you recommend using the drug as part of a treatment for obsessive-compulsive-disorder?

Q. 4 Discuss the properties of the normal distribution.

IQ is normally distributed with a mean of 100 and a standard deviation of 15. What is the probability that a person chosen at random has an IQ:

- (i) Less than 100
- (ii) More than 118
- (iii) Between 91 and 112.

Q. 5 The following data pertaining to the number of members in a family has been collected from a sample survey of 60 families. You have to form a frequency distribution and calculate the mean, median and mode.

5	11	4	6	3	10	5	7	9	6
6	2	3	7	8	6	4	3	6	5
9	5	6	4	7	1	5	8	6	2
7	8	3	6	7	5	5	8	6	4
6	11	5	2	6	9	7	3	7	5

Q. 6 Write explanatory notes on the following:

(a) Advantages of sampling

(b) Ways of presenting data

(c) Probability and the logic of statistical inference

(d) SPSS