

FINAL EXAMINATION QUESTION PAPER MAY 2015

TITLE OF PAPER: RESEARCH METHODS

COURSE CODE: SOC 201

TIME ALLOWED: THREE (3) HOURS

INSTRUCTIONS:

- (1) Answer All Questions from Section A**
- (2) Any three (3) Questions from Section B.**
- (3) Use of Calculators, graph papers and Chi-square tables are allowed.**
- (4) Total marks 100**

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HAS BEEN GRANTED BY THE INVIGILATOR**

(a) Temperature (b) Allergies (c) weight (d) pain level (0 to 5)

(ii) Determine in each case whether the data are qualitative or quantitative.

5 marks

- (a) The player numbers for a soccer team.
- (b) The telephone numbers in a telephone directory.
- (c) The length of songs on an MP3 player.
- (d) The final exam scores in Research Methods class.
- (e) A list of post office box numbers.

(iii) State whether the following are *True* or *False*. Give an explanation for your answer.

4 marks

- (a) More types of calculations can be performed with data at the nominal level than with data at the interval level.
- (b) Data at the ordinal level are quantitative only.

(iv) "A study of the effect on the human digestive system of potato fries made with a fat substitute."

Which method of data collection you would use to collect data for the above study? Explain.

2 marks

(v) Determine in each of the following cases whether the data set is a population or a sample. Explain your reasoning.

6 marks

- (a) The age of each member of the Parliament.
- (b) The height of every fourth person entering an amusement park.
- (c) A survey of 300 spectators from a stadium with 21,000 spectators.
- (d) The cholesterol levels of 20 patients in a hospital with 100 patients.
- (e) The number of televisions in each Swazi household.
- (f) The annual salary for each lawyer at a firm.

(vi) Identify the population and sample in the following cases.

3 marks

- (a) A journalist goes to a game park to ask people how they feel about air pollution.
- (b) For quality assurance, every tenth machine part is selected from an assembly line and is measured for accuracy.
- (c) A study of attitudes about smoking is conducted in a college. The students are divided by year of study. Then a random sample is selected from each class and interviewed.
- (viii) Formulate two hypotheses, each relating two variables from the following list. For each hypothesis, specify the independent and dependent variables. 4 marks
- (a) Gender (male/female).
- (b) Level of education.
- (c) Marital status.
- (d) Belief in life after death.
- (e) Attitude towards capital punishment.
- (ix) Point out whether the following questions in a questionnaire are appropriate without an explanation and indicate their defects, if any: 6 marks
- (a) What is your occupation?
- (b) When did you last get a woollen suit stitched?
- (c) Do you find the quality of ball-point pens better now?
- (d) Which brand of tooth- paste do you use?
- (e) Would you like to make any suggestions to improve its quality?
- (f) How much money do you owe to shylocks?

SECTION B

ANSWER ANY THREE QUESTIONS FROM THIS SECTION

60 Marks

Question No. 1

What is meant by informed consent in research? Discuss how it protects research subjects. Explain the major ethical issues in the Stanley Milgram and Philip Zimbardo studies.

20 marks

Question No. 4

Discuss the advantages and disadvantages of closed ended and open ended questions.

20 marks

Question No. 5

In a trial of a new drug against a standard drug for treatment of depression the following results were assessed from 150 patients who were classified into 5 categories as shown below:

<u>EFFECT OF TREATMENT</u>	<u>TYPES OF TREATMENT</u>	
	<u>NEW TREATMENT</u>	<u>STANDARD</u>
Much improved	18	12
Improved	23	17
Unchanged	18	19
Worse	12	14
Much worse	9	8

Calculate the chi-square for this distribution and test the hypothesis, whether there is a significant difference between the two drugs/the two types of treatments at a significance level of 0.05.

20 marks

Question No. 6

Write short notes on any four (4) of the following:

20 marks

- (i) Basic and applied research.
- (ii) Triangulation.
- (iii) Focus group interviews.
- (iv) Using internet for research.
- (v) Cluster sampling.
- (vi) Cross-sectional and longitudinal designs.