INTERNATIONAL ADVANCED DIPLOMA IN LOGISTICS AND TRANSPORT

RESEARCH METHODS & DATA ANALYSIS
ADIP06

JUNE EXAMINATION 2024

Instructions to Candidates

- Duration of examination: **3 hours**
- **Answer any FIVE questions.**
- Questions may be answered in any order.
- Allocation of marks is indicated along each question.
- Credit will be given for citing relevant examples.
- Write legibly.

Question 1

a) With the aid of relevant examples define the following terms

i. Independent variables **(2 marks)**
ii. Causal research **(2 marks)**
iii. Descriptive statistics **(2 marks)**
iv. Positive correlation **(2 marks)**
v. Hypothesis testing **(2 marks)**

b) Describe TWO methods of primary data collection. **(4 marks)**

c) Explain any three qualities of an effective research topic. **(6 marks)**

20 marks

Question 2

Statistics and business research are an interlinked aspect. Discuss the link highlighting the roles of statistics in business research and data Analysis. **(20 marks)**

Question 3

Briefly define the following forms of measurements that are used in quantitative research providing examples of situations when it is most appropriate to use one and not the other.

a) Nominal level of measurement. **(5 marks)**

b) Ordinal level of measurement. **(5 marks)**

c) Interval level of measurement. **(5 marks)**

d) Ratio level of measurement. **(5 marks)**

Question 4

You have been asked to advice a class of CILT Advanced Diploma students. These students are expected to develop their research proposals before the end of the course. Now that you are an expert in this field, explain to them aspects that enable them to come up with a good research proposal. **(20 marks)**

Question 5

Most research work is based on samples as opposed to the population. Explain FIVE reasons why business researchers prefer using a sample instead of the population. **(20 marks)**

Question 6

Using appropriate examples, discuss any FIVE ethical considerations that should guide a study.

(20 marks)