

**CHARTERED INSTITUTE OF LOGISTICS AND TRANSPORT**

**INTERNATIONAL ADVANCED DIPLOMA IN LOGISTICS AND TRANSPORT**

**ADIP-06 RESEARCH METHODS & DATA ANALYSIS**

**November 2021**

**Note to Candidates**

**The aim of this paper is to establish a learner’s understanding of the general principles and applications involved in in Research Methods and Data Analysis. Candidates are encouraged to write critically and make use of relevant examples where applicable.**

**Instructions to Candidates**

**Answer Question 1 in Section A and 3 Questions in Section B**

**3 HOURS**

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**SECTION A**

**QUESTION 1 (Compulsory Question) [25]**

**Case study**

The Production Director (PD) wants an attractive and sustainable packing for a new brand of powdered milk. The Research Advisor is suggesting a research using and experimental research design, the Production Director wonders whether a research is required for this, and if so, is an experimental research design suitable for this purpose.

1. What are the advantages and disadvantages of the experimental research [6]
2. Explain any two types of research design you are familiar with [4]
3. How could you advise the Production Director [15]

**SECTION B Total 75 marks**

**Question 2**

Differentiate between;

1. Descriptive statistics and inferential statistics [5]
2. Research objectives and research questions [5]
3. Probability sampling and Non-probability sampling [5]
4. Nominal variables and Ratio variables [5]
5. References and bibliography [5]

**Question 3**

Explain in detail the merits and demerits of different methods of collecting primary data. [25]

**Question 4**

1. Explain the concept of regression. [5]
2. Explain different sources of secondary data and the precautions in using secondary data. [20]

**Question 5**

“Research is much concerned with proper fact finding, analysis, interpretation and evaluation.” Discuss data interpretation and evaluation as fundamental components of research process. [25]