



CII Institute of Logistics  
PGDSCM & Certificate Programs  
*Semester-end Examination – June 2010*

Research Methodology

Time : Three Hours

Marks : 100

Part A

Answer all questions

(10 x 1 = 10 Marks)

1. A Researcher can collect his required information from
  - a) Primary sources
  - b) Secondary sources
  - c) Both Primary and Secondary sources
  - d) None of the above
2. Chi- square test is a
  - a) Parametric Test
  - b) Sample Test
  - c) Non- Parametric Test
  - d) Quantitative Test
3. Important measures of Dispersion are .....
  - a) Arithmetic mean, Median and standard deviation
  - b) Mean Deviation, Standard deviation and Range
  - c) Mean Deviation, Median and Standard deviation
  - d) Mean, Median and Mode.
4. Type –I error means:
  - a) Accepting Null Hypothesis when it is false
  - b) Accepting Null Hypothesis when it is True
  - c) Rejecting Null Hypothesis when it is False
  - d) Rejecting Null Hypothesis when it is False
5. A questionnaire should be :
  - a) Brief and easy to understand
  - b) Attractive and lengthy one
  - c) Specific and lengthy one
  - d) Clear and ambiguous
6. Assumptions in Non- parametric tests.....
  - a) Sample observation are dependent and variable is continuous.
  - b) Sample observation are independent and variable is continuous
  - c) Sample observations are dependent and variable is simple
  - d) Sample observations are independent and variable is simple
7. Convenience sampling is an example of
  - a) Simple Random Sampling
  - b) Non- Probability Sampling
  - c) Probability Sampling
  - d) Systematic Sampling
8. Processing of data includes .....
  - a) Collection of data
  - b) Editing, coding, classification and tabulation.
  - c) Collecting and editing of data
  - d) None of the above
9. The lay-out of the report consists of.....
  - a) Primary parts and secondary parts
  - b) The Preliminary, the main text and the end matters
  - c) Introduction and conclusion
  - d) None of the above

10. Analysis of Variance (ANOVA) technique was mainly used in .....Research

- a) Applied Research
- b) Agricultural Research
- c) Business Research
- d) Industrial Research

Part B

Answer any four

(4 x 15 = 60 Marks)

- 1) What is research ? Explain the aims and objectives of research?
- 2) Explain the different methods of sampling with example?
- 3) Discuss any Five methods of data collection?
- 4) Short notes on:
  - a. Uses of Statistics in Research
  - b. Factor analysis
  - c. Research Problem
- 5) Define the term Hypothesis and also explain different types of hypothesis with examples.
- 6) What do you mean by multivariate techniques? Explain their significance in context of research studies?

Part C

Answer any three

(3 x 10 = 30 Marks)

- 1. The following data present the number of units of production per day turned out by 5 different workers using 4 different types of machines.

	Machine type			
Workers.	A	B	C	D
1	44	38	47	36
2	46	40	52	43
3	34	36	44	32
4	43	38	46	33
5	38	42	49	39

Carry out an analysis of variance and state your conclusions.

- 2 A population is divided into three strata so that  $N_1=2,500$ ,  $N_2=1,000$  and  $N_3=1,500$ . Respective standard deviations (SD) are  $SD_1=7.5$ ,  $SD_2=9$  and  $SD_3=2.5$ . How should a sample of size  $n = 42$  be allocated to the three strata, if we want optimum allocation using disproportionate sampling design.
- 3 "Content analysis deals with the classification, organization and comparison of the content of document or communication." With reference to the above statement, discuss
  - a) Uses of content analysis
  - b) Advantages of content analysis

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