INDIAN INSTITUTE OF MATERIALS MANAGEMENT

Post Graduate Diploma in Materials Management

June 2012

Graduate Diploma in Materials Management
PAPER No. 13
Research Methodology

Date : 17.06.2012   Max. Marks :100
Time : 10.00 a.m to 1.00 pm   Duration : 3 Hrs.

Instructions :
1. Part A: Four Questions (Q 1 to Q 4). All questions are compulsory. Each Question carries 8 marks. **(Total marks 32).**
2. Part B: From Part B answer any three out of 5 questions. Each question carries 16 marks**.**   **(Total marks 48).**
3. Part C: (Compulsory). Case study**.**   **(Total marks 20)**

Part A   (8 x 4 = 32 marks)

1.   Fill up the blanks

a)   Source of information for a Research worker is _____

b)   Interpretation & analysis of data Research should avoid _____

c)   Hypothesis must be based on sound _____

d)   Capital structure and ratio analysis are covered in _____ of research

e)   Ex-post facto study is not an _____

f)   _____ is the criteria of good Research problem

g)   Hypothesis is a _____ generalisation

h)   Concept of different quantitative values are _____

2.   Match the following :-

	Column A		Column B
a)	Forms of Scientific Method	a)	Daily problem, unexplored areas
b)	Basic Research	b)	Review of literature
c)	Applied Research	c)	Guidance System of distribution of mass consumption item
d)	Exploratory Research	d)	Einstein's theory of Relativity
e)	Source of Research Problem	e)	For more precise investigation
f)	Null hypothesis is told	f)	Historical
g)	Extraneous variable	g)	When it is stated negatively
h)	Major steps in preparing Research Design	h)	Not affect dependent variable

3. **Find true or false from the followings :-**

   a) Reliability has to do with precision of a measured procedure

   b) Halo effect is the systematic bias

   c) Portal is not a search engine

   d) CATI is Computer Assisted Telephonic interview

   e) Independent variable and Dependent Variable has causal relationship

   f) Mode is central value of the data

   g) Median is the highest value of the data

   h) Null hypothesis is used for testing

4. **State the full form of the abbreviations**

   a) H_O

   b) H_A

   c) UCL

   d) ANOVA

   e) MA

   f) MANOVA

   g) SD

   h) EDA

Part – B
(Answer any three)   (16x3= 48 marks)

5. a) Distinguish between Parametric test and non-parametric test

   b) Discuss Type I error and Type II error

6. **Write short notes (any two)**

   a) Mean, Median, Mode

   b) Null Hypothesis

   c) Chi Square Test

   d) Exploratory Data Analysis

7.   **Write the difference between Phi (φ) & Cramer's V**

8.   **Distinguish between**

   a)   Regression Coefficient & Correlative Coefficient

   b)   Oral and Written Reporting

9.   a) What is independent variable and what is dependent variable?

   b) Briefly explain Diagram & Graph

Part C   20 Marks

10.   **Case Study**

With the sample of 100 Accounts, mean age of outstanding receivables is 52.5 days. With a standard deviation of 14; Do these results indicate the population mean might still be 50 days.

Justify with your analysis
(Critical test value from table is 1.66)