



INDIAN INSTITUTE OF MATERIALS MANAGEMENT

Post Graduate Diploma in Materials Management

June 2014

Graduate Diploma in Materials Management

PAPER No. 13

Research Methodology

Date : 22.06.2014

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 1 mark. (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

32 marks

Attempt all questions. Each Question carries 1 mark.

Q : 1 Select Correct Answers From the Following:

8 marks

(Write the Full answer of Your Choice and not only – a, b, or c)

A. Secondary Data is :

- a) Data Collected First in Study
- b) Census Data ,
- c) Data collected through the Questionnaire .

B. In Quota sampling , sample is selected :

- a) In equal proportion from each strata .
- b) In unequal proportion from each strata.
- c) By allotting Fix Number to each strata .

C. Median of the Data : 30, 31, 20, 22, 24, 26, 16, 18 is –

- a) 22 , b) 24 , c) 23 .

D. In Research study , a Census is appropriate if :

- a) The population size is small .
- b) Researcher has ample time for study .
- c) Sampling application is not possible.

E. A Consumer Prize Index is used to determine -

- a) Purchasing Power of Money .
- b) Minimum wage of workers.
- c) Import policy of Govt.

F. Application of Chi Square test is possible if :

- a) Sample size is less than 50 .
- b) Equal to or more than 50.
- c) Must be more than 50 .

G Mistakes if any can be Pin-pointed and corrected easily in :

- a) Oral Report , b) Written report . c) In both .

H Mail Questionnaire is very suitable as :

- a) Only responsible people sends it back .
- b) Sensitive Questions can be included .
- c) Larger number of the people covering wide area can be contacted .

Que. 2 : Fill in the Blanks . (Selecting from the given choices)

8 Marks .

a) Marketing Research is not useful if it -----

- i) takes long time to conduct . ii) is very expensive one .

b) Exploratory Research would be ideally suited -----

- i) to generate new product idea . ii) to study market competition.

c) In observation method it is not possible to gather information on :

- i) Intensity of problem . ii) Opinions and intentions .

d) Observation and Experimentation are some of the methods of collecting ----- in Research .

- i) Primary Data ii) Secondary Data .

e) The ----- is the central value or the item that occurs most often .

- i) Mode ii) Median .

- f) Quota Sampling is ----- type of sampling .
 i) Probability ii) Non- probability .
- g) Dichotomous Questions have ----- answers.
 i) Only Two ii) Multiple .
- h) Graphical presentations is another way of ----- presentation.
 i) Mathematical ii) Pictorial .

Q : 3 Match the Pairs . (Write full correct pairs)

8 marks

A	Chi -Square Test	Can identify the pairs for their more or less similar characteristics.
B	Hypothesis	Predicts the value of one variable from the other .
C	Experimentation	Statistics that all ready exists .
D	INOVA	Non - Parametric Test .
E	Secondary Data	Controlled group method
F	Regression Analysis	Used to test the equality of three or more sample means .
G	Pictorial presentation	Tentative Proposition .
H	Sign Test	Pie –Chart .
	-----	H – Test .

Q : 4 State True or False :

8 marks

- a) Diagrams are liable to be misused for presenting an illusory picture of a problem .
- b) Market Research is an exact science .
- c) Personal Interview is the best method of Data Collection techniques in Industrial Research.
- d) Experimentation is a research process in which all variables are manipulated .
- e) In open end questions, respondents are not free to answer in their own wards.
- f) Graphic presentation of data can indicate the nature and direction of trends of the Data.
- g) Data error occurs during the data collections, data analysis or its interpretations.
- h) Average of First and last Value in given data arranged in ascending order is called Mode.

PART - B

(Answer Any Three Questions)

16 x 3 = 48 marks

Que. 5 : Explain In Short :

- (a) Research Design . (b) Case Study
(c) Experimental Research . (d) Observation Method.

Que. 6 : Discuss various Tools of Data Collection used in Market Research ? Which Tool is most preferred in M. R ? What are its advantages over other tools ?

Que. 7 : Write Notes On .

- (a) Random Sampling . (b) Quota Sampling .
(c) Area Sampling . (d) Purposive Sampling .

Que. 8 : (A) Calculate the Median from the Following Data .

8 marks

Class	Frequency	Cumulative Frequency
00 to 10	6	6
10 to 20	11	17
20 to 30	14	31
30 to 40	20	51
40 to 50	15	66
50 to 60	09	75
60 to 70	05	80

(B) Calculate A.M. of the following Frequency Distributions .

8 marks

Daily Wage of Workers in Rs.	120	125	130	135	140	145	150
Number of Workers	3	5	8	14	10	6	4

Que. 9 : (A) Define and Explain the Terms :

8 marks

- (a) Correlation and Coefficient of Correlation .
(b) Regression and regression Equation.

(B) Write a Note on Types of Research Reports with emphasis on their advantages and disadvantages.

8 marks

PART- C (Compulsory)

20 marks

CASE STUDY

Q. 10 A Car Manufacturing Company XYZ Limited is holding its number ONE Position in entry level segment / small cars since last 15 yrs. The Company noticed that since last 3 Years , its market share in small cars has come down from 85 % to 60 % even though their car is lowest in prize in its segment . In order to find out the facts / reasons for their fall of sale , Marketing Department. is assigned to undertake the study and suggest the measures in order to achieve back number one position in small car segment .

As a Market Research Consultant , answer the following questions

- a. What would be your approach to plan and undertake the study ? Who will be your Targeted Respondents to be included in Sample Group .
- b. Which Research Method you will prefer to undertake this study ? Why ?
- c. What type of Method of Data Collection you will prefer ? What would be the various Items of Information on which Data is to be collected ?
- d. Work out Tool for Data Collection so that minimum 10 important items of information on which Data will be available to draw meaningful conclusions..
