IN INSTITUTE OF MATERIALS MANAGEMENT

Post Graduate Diploma in Materials Management

Graduate Diploma in Materials Management

PAPER No. 13

Research Methodology

Date : 18.06.2018

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.

Q1. True Or False

a) An exploratory research design is qualitative in nature
b) Survey where responses are taken only once from a sample is a longitudinal study
c) A bar diagram is used to represent continuous variable
d) Observation method is used in descriptive research
e) Chi-square is used to test relationship between one continuous and one categorical variables
f) Segmentation research is a problem solving research
g) Non response error is an example of non sampling error
h) In stratified sampling there is homogeneity within the group

Q2 fill the blanks

a) Working hypotheses is done after ----- study
b) To select every 15th name on a list is ----- sampling
c) Hypotheses may be tested by use of ---- test
d) Summated scale is named as-------- type scale
e) Sampling error is summation of chance error and ------- error
f) Ratio scale is an absolute --- of measurement
g) -------- is a measure of dispersion

H) Changes in economic phenomena can be compared by ------ no.

Q3 state full form of given abbreviation

1) CV 2) B2B 3) SE 4) VAR 5) LP 6) ERP 7) ROI 8) RM
Q4 Match the following

1. forms of scientific method  a. when stated negatively
2. Applied research  b. daily problem un explored areas
3. basic research consumption items  c. guidance system of distribution of mass
4. exploratory research  d. theory of relativity
5. source of research problem  e. more precise investigation
6. null hypotheses  f. historical
7. median  g. mid value
8. independent and dependent variables  h. causal relationship

PART

(Answer any three, each question carry 16 marks)  (3 x 16 = 48 Marks)

Q5 From following data find the 7th year profit

Expenditure on R and D  5, 11, 4, 5, 3, 2.
Profit  31, 40, 30, 34, 25, 20

Q6 What is the relation between sample size and standard error?

If growth of interest rate is 7, 8, 10, 12, 18. Then deposit of Rs 100 what is the growth after 5 years find by simple AM and GM

Q7 Explain the steps of collection of primary and secondary data
Q.8 Define price index?

The quantity (q) and price for different commodities shown in base year (po) and sp year (p1) find fixed wt aggregate price index

<table>
<thead>
<tr>
<th>Q</th>
<th>PO</th>
<th>PI</th>
</tr>
</thead>
<tbody>
<tr>
<td>coal</td>
<td>158</td>
<td>7.5</td>
</tr>
<tr>
<td>Iron</td>
<td>12</td>
<td>9.2</td>
</tr>
<tr>
<td>Nickel</td>
<td>5</td>
<td>12</td>
</tr>
</tbody>
</table>

Q.9 Write short notes (any two)

a. Mean, median, mode
b. Chi square test
c. Cramers v
d. Regression coefficient
e. Null hypotheses

PART C (compulsory) (20 Marks)

Q10 case study

A researcher is doing internet shopping research

30 users were surveyed, 17 people indicated they are using internet shopping

Probability of internet shopping is 40 percent, if 95 percent reliability. The value of z is 1.64 test null hypotheses.