INDIAN INSTITUTE OF MATERIALS MANAGEMENT



Post Graduate Diploma in Materials Management- 3 years **Graduate Diploma in Materials Management** Paper No. 13 RESEARCH METHODOLOGY

Dec 2019

Date: 30.12.2019 Max .Marks: 100. Time: 10.00 to 1.00 p.m. **Duration: 3 hours**

Instructions:

- 1. The Question Paper is in two parts- Part A (compulsory) and Part B.
- 2. From Part A answer all the questions. Each question carries 1 mark, total 25 marks. (Total Marks 25)
- 3. From Part B answer any five questions. Each question carries 15 marks, total 75 marks.
- 4. Use of non-scientific calculator and/or mathematical tables is permitted. Graph paper can be used wherever necessary.

PART A

(25 x1 = 25 marks)

(Compulsory, each sub-question carry one mark)

Q.1: State whether the following statements are true or false:

[10 marks]

- a. Research is an art of scientific investigation.
- b. Research design is not an important step in marketing research.
- c. Analysis of the data involves Editing, Codifying and Tabulating.
- d. Exploratory Research is a type of research only.
- e. First hand data collected is not a Primary Data.
- f. Numerical figures represented by pictures are pictograms.
- g. A frequency distribution can not be represented by means of a graph.
- h. A sample is a part of a target population, which is carefully selected to represent the population.
- i. The theory of probability is not a study of Statistical or Random Experiments.
- j. Point estimate and Internal Estimate are two types of Estimates.

Q.2: Expand the following:						[5 Marks]
	a. SPSS	b. NRS	c. AIMA	d. MCD	e. ROI	
Q. 3: Fill in the blanks:						[10 Marks]
	a. Research in common man's language refers to					
	b Andare two broad approaches for collection of primary data					
	c. Logarithmic graph is obtained when both the axes are measured in Unit.					
	d. Sampling is of two types namely Probability andsampling.					

e. Axiomatic approach to Probability is also known as.....approach to Probability.

- f. An estimator is a function of the sample data that is used to estimate an unknown population parameter which is called the
- g. A relative measure of dispersion that enables us to compare two distributions is
- h. Dolex 30 is a dollor linked version of......
- i. Under Hypothesis Testing there are to types of tests i.e.....and
- j. KISS approach stands for

(Answer any five)

Q. 4 a. Describe the Qualities of a Researcher. What is the difference between a Researcher and a Manager [15 Marks]

Q. 5: Describe the various types of Research and methods of Research. [15 marks]

Q. 6 Present the following data by a SQUARE Diagram: [15 marks]

Year : 2000 2004 2008 2012 2016

State's export : 1823 4970 6591 9981 20295

(In ₹ crore)

Q. 7: Write short notes (any three)

[3 x5 = marks]

- a. SPSS Software
- b. Oral Report & Written Report
- c. Binomial Distribution
- d. Types of Diagrams

Q. 8: Describe common forms of graphics of a frequency distribution [15 marks]

Q. 9: a. Explain about Analysis of Variance (ANOVA) [10 Marks]

b. Compute the rate of inflation for the following data: [5 marks]

Year : 2010 2011 2012 2013 2014 2015

Price Index : 108.2 114.6 120.5 123.3 128.2 130.1

Q. 10: From the following data, find out the types of association of A and B. [15 marks]

1. N=200 (A) =100 (B) =100 (AB) =15

2. N=400 (A) =50 (B) =160 (AB) =20

3. N=800 (A) =160 (B) =300 (AB) =50

Q. 11: Describe about preparation of Research Report. [15 Marks]
