

**R17****Code No: 741AF****JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****MBA I Semester Examinations, April/May-2019****BUSINESS RESEARCH METHODOLOGY****Time: 3 hours****Max.Marks:75****Note:** This question paper contains two parts A and B.

Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

**PART - A****5 × 5 Marks = 25**

- 1.a) What is the importance of ethics in business research? [5]
- b) What is bias in survey? What are the reasons for bias? [5]
- c) Calculate the Standard Deviation of the following data: [5]  
Age (in years): 23 27 28 29 30 31 33 35 36 38
- d) Distinguish between R-type and Q-type factor analysis. [5]
- e) Compare and contrast the findings and conclusions of a research study. [5]

**PART - B****5 × 10 Marks = 50**

2. Describe the process of business research. Do the stages in the research process follow the scientific method? [10]

**OR**

3. Explain the following:  
a) Operationalization and Conceptualization  
b) Internal and External Validity. [5+5]

- 4.a) Compare and contrast Cross Sectional and Longitudinal Design.  
b) A random sample of 10 boys has the following IQs:  
70, 120, 110, 101, 88, 83, 95, 107, 100 & 98.  
Do these data support the assumption of a population mean of IQ of 100? [5+5]

**OR**

- 5.a) "Research design in exploratory studies must be flexible but in descriptive studies, it must minimize bias and maximize reliability" - Discuss.  
b) A production manager wants to assess the reactions of the blue-collar workers in his department (including foremen) to the introduction of computer integrated manufacturing (CIM) systems. He is particularly interested to know how they would perceive the effects of CIM on:  
(i) their future jobs  
(ii) additional training that they will have to receive  
(iii) future job advancement.  
Design a questionnaire for the production manager. [5+5]

- 6.a) What is Frequency Distribution? Explain briefly.  
 b) The results of a particular examination are given below in a summary form:

Result	Percentage of Candidates
Passed with distinction	10
Passed	60
Failed	30

It is known that a candidate gets plucked if he obtains less than 40 marks, out of 100 while he must obtain at least 75 marks in order to pass with distinction. Determine the mean and standard deviation of the distribution of marks assuming this to be normal.

[5+5]

**OR**

- 7.a) What is Skewness? Explain the types of skewness.  
 b) Calculate the Karl Pearson's coefficient of correlation for the following data:

X	28	45	40	38	35	33	40	32	36	33
Y	23	34	33	34	30	26	28	31	36	35

[5+5]

- 8.a) What do you mean by a Two-Factor Table? Explain.  
 b) Find the regression equation from the following and estimate the yield for rainfall of 10 inches:

Rain fall (inches):	1	2	3	4	5	6	7	8	9
Yield (Tons):	1	3	2	5	5	7	6	9	8

[5+5]

**OR**

- 9.a) Explain the following:  
 (i) Cluster Analysis; and (ii) Structural Equation Modeling.  
 b) Find the regression equations for the following data and also product the average value of y when x is 9:

X:	3	6	5	4	7	2	8	1
Y:	3	2	3	5	3	6	6	4

[5+5]

- 10.a) "Interpretation is an art of drawing inferences, depending upon the skill of the researcher". Elucidate the given statement explaining the technique of interpretation.  
 b) Describe some of the important applications and uses of computers in present times.

[5+5]

**OR**

- 11.a) Discuss the role of subjectivity and objectivity in research.  
 b) 'Computer graphics will have an impact on the research report writing format' - Elaborate this in the light of computer application of report writing.

[5+5]

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