

**R17**

Code No: 741AF

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**
**MBA I Semester Examinations, January-2018**
**BUSINESS RESEARCH METHODOLOGY**
**Time: 3hours**
**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) How can a researcher handle the issue with reliability? [5]
- b) What are major sources of gathering secondary data? Explain. [5]
- c) What is the significance of hypothesis testing in managerial decision making? [5]
- d) Differentiate between hierarchical clustering and non-hierarchical clustering. [5]
- e) Briefly explain the challenges of the oral presentation. [5]

**PART - B**
**5 ×10 Marks = 50**

2. Identify the level of data measurement in the following examples. Explain the statistical tests that can be for these measurement.  
 a) Preferred mode of payment (Cash, Net Banking, Credit Card)  
 b) Age (in completed years) \_\_\_\_\_  
 c) Rank the order of preference for shopping clothes (Flipkart, Amazon, Myntra). [10]

**OR**

3. Explain the following terms  
 a) Hypothesis and Proposition  
 b) Predictor and Criterion variable  
 c) Applied and Basic research  
 d) Moderating and Mediating variable. [10]
4. What are the steps involved in the questionnaire design process? Explain briefly. Design a sample questionnaire for understanding the "Brand Switching" behaviour among telecom consumers. [10]

**OR**

5. What is Research Design? What are the types of design available based on time dimension and purpose of study? Explain with relevant case scenarios. [10]
6. Explain the following terms with suitable examples  
 a) Spurious Correlation  
 b) Cross Tabulation  
 c) Frequency Distribution  
 d) Type I and Type II error. [10]

**OR**

7. In a survey conducted among 45 respondents, data were obtained on Brand X about usage, sex, awareness, attitude, preference, intention and loyalty towards the brand. Usage coded on 3 points (1-light, 2-medium, 3-heavy), Sex as (1-female, 2-male) and other variables were measured on 7-point scale (1-very unfavourable, 7-very favourable). Interpret the following data and give answers to the following questions.

**User Group \* Sex Crosstabulation**

Count

		Sex		Total
		Female	Male	
User Group	Light Users	14	5	19
	Medium Users	5	5	10
	Heavy Users	5	11	16
Total		24	21	45

a) Interpret the results of the above table

b) Do male and female differ in their awareness, attitude and loyalty for Brand X. Justify your answers based on the following table. [4+6]

**Group Statistics**

	Sex	N	Mean	Std. Deviation	Std. Error Mean
Awareness of Brand X	Female	23	3.57	1.903	.397
	Male	21	4.86	1.652	.360
Attitude toward Brand X	Female	24	3.58	1.998	.408
	Male	20	4.65	1.663	.372
Loyalty for Brand X	Female	23	4.17	1.696	.354
	Male	21	3.71	1.678	.366

8. A sample study conducted among 20 respondents captured the preference for sneakers on a 7-point scale (1-not preferred, 7-greatly preferred). The respondents were also asked to evaluate the sneakers based on three characteristics (comfort, style and durability) on 7-point scale (1-poor, 7-excellent). Interpret the following table and provide answers to the following questions.

**Descriptive Statistics**

	Mean	Std. Deviation	N
Preference for Sneakers	3.85	1.899	20
Comfort	4.15	1.182	20
Style	3.75	1.650	20
Durability	4.25	1.773	20

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.741 <sup>a</sup>	.548	.464	1.391

a. Predictors: (Constant), Durability, Style, Comfort

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	37.599	3	12.533	6.479	.004 <sup>b</sup>
	Residual	30.951	16	1.934		
	Total	68.550	19			

a. Dependent Variable: Preference for Sneakers

b. Predictors: (Constant), Durability, Style, Comfort

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.539	1.183		-.455	.655
	Comfort	.258	.360	.161	.717	.484
	Style	.504	.234	.438	2.152	.047
	Durability	.336	.214	.313	1.571	.136

a. Dependent Variable: Preference for Sneakers

- What is the significance of 'R Square' statistic in Model summary?
- What is the impact of the three independent variables on the dependent variable?
- Is the regression relationship significant? [4+4+2]

**OR**

- What are the steps in performing cluster analysis?
  - Under what circumstances a researcher should apply cluster analysis. [5+5]
- What type of report would you suggest for the following cases?
    - The regional manager has asked you to prepare a forecast of promotional budget requirements for your region for the upcoming FY.
    - The Department of Women and Child Health has allotted a grant to study the relationship between dengue awareness campaigns and subsequent improvement in healthcare of a particular locality. [5+5]

**OR**

- Explain with suitable example the appropriate way of presenting tables and graphs in the research report. [10]

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