Time allowed: 2 hrs 30 min

Max Marks: 50

Roll No: _____

Instruction: Students are required to write Roll No on every page of the question paper, writing anything except the Roll No will be treated as **Unfair Means.** In case of rough work please use answer sheet.

Sections	No. of Questions to attempt	Marks	Marks
A	3 out of 5(Short Questions)	5 marks each	3*5 = 15
B	2 out of 3 (Long Questions)	10 marks each	2*10= 20
C	Compulsory Case Study	15 marks	15
		Total Marks	50

Section A

A1. What is the first step in conducting a marketing research project? Why is it important to define the marketing research problem appropriately?

A2. Why is small sample size adequate for an exploratory study but not for a descriptive one? What kind of information will not be reliable if a small sample is used in a descriptive study?

A3. In order to determine customer satisfaction rates, a retail company conducted surveys of 582 customers at 4 store locations. The cross tabulation shows the frequency of each response at each store location.

Count

		Service satisfaction					
		Strongly Negative	Somewhat Negative	Neutral	Somewhat Positive	Strongly Positive	Total
Store	Store 1	25	20	38	30	33	146
	Store 2	26	30	34	27	19	136
	Store 3	15	20	41	33	29	138
	Store 4	27	35	44	22	34	162
Total		93	105	157	112	115	582

Given this information, you want to test whether each of the store locations provides a similar and adequate level of customer service. A chi-square test, for Store by Service satisfaction was executed.

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	16.293[a]	12	.178
Likelihood Ratio	17.727	12	.149
Linear-by-Linear Association	.084	1	.772
N of Valid Cases	582		

Formulate the appropriate hypothesis and interpret the result from the given SPSS output table.

A4. What is the importance of a research report for a researcher? Why does a researcher have to incorporate an executive summary in the research report?

A5. Below is the output for the SPSS ONEWAY procedure to compare the means of three school types (public, charter, private) in a hypothetical teacher satisfaction example.

Oneway

Descriptives

satisfaction teacher satisfaction

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
1.000 public	5	6.0000	2.00000	.89443	3.5167	8.4833	4.00	8.00
2.000 charter	5	9.0000	1.00000	.44721	7.7583	10.2417	8.00	10.00
3.000 private	5	6.0000	.70711	.31623	5.1220	6.8780	5.00	7.00
Total	15	7.0000	1.92725	.49761	5.9327	8.0673	4.00	10.00

ANOVA

satisfaction teacher satisfaction

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	30.000	2	15.000	8.182	.006
Within Groups	22.000	12	1.833		
Total	52.000	14			

Is the model statistically significant, comment with proper explanation?

Section B

B1. Define the appropriate target population and the sampling frame in each of the situations:

a) The manufacture of a new cereal brand wants to conduct in-home product usage tests in Delhi.

b) A national chain store wants to determine the shopping behaviour of customers who have its store charge card.

c) A local TV station wants to determine households' viewing habits and programming preferences.

d) The local chapter of the Indian Marketing Association wants to test the effectiveness of its new members drive in Rajasthan.

B2. Design an open-ended question to determine whether house-holds engage in gardening. Also, develop a multiple-choice and a dichotomous question to obtain the same information. (* don't frame more than seven questions). According to you, which form is the most desirable?

B3. A research analyst would like to predict physical and downloaded album sales from a set of predictors viz. amount of money spent on advertising the album and number of plays on radio (airplay). The data file contains 200 observations; SPSS output are here for your reference,

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.793[a]	.629	.626	49.383	2.055

a. Predictors: (Constant), No. of plays on Radio, Advertising Budget (Thousands of Pounds)

b. Dependent Variable: Album Sales (Thousands)

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	815524.122	2	407762.061	167.203	.000[a]
	Residual	480427.878	197	2438.720		
	Total	1295952.000	199			

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	41.124	9.331		4.407	.000		
	Advertsing Budget (Thousands of Pounds)	.087	.007	.523	11.991	.000	.990	1.010
	No. of plays on Radio	3.589	.287	.546	12.513	.000	.990	1.010

a. Dependent Variable: Album Sales (Thousands)

a) Is the model statistically significant, comment with proper explanation?

b) Interpret R, R Square and Adjusted R Square.

c) Would you expect multicollinearity among the independents? Why or why not?

SECTION C

Case Study- Procter & Gamble: Using Market Research to build brands

P&G is the number one U.S. maker of household products, with nearly 300 brands in five main categories; baby, feminine, and family care; fabric and home care; beauty care; health care; and food and beverages. As of 20015, the company delivered products to nearly five billion consumers in more than 140 countries around the world. The stated purpose of the company is to "provide products and services of superior quality and value that improve the lives of the world's consumer."

Over time Procter & Gamble has proven to be an innovator in creating brands and understanding consumers by making extensive use of marketing research. Building brands has been a cornerstone of P&G's success. The marketers at P&G undertake marketing research to determine a brand's equity and then make sure everyone understands it, because that drives every decision made about the brand.

P&G thinks of marketing in many of the same ways that they used to. They have always thought about the consumers and why the product would be relevant to the consumers. They believe in catering to the experience of the consumer. Their principles of marketing haven't changed, but their methods of targeting and identifying consumers have changed to meet the increasingly complicated consumer base. They have changed their key strategy from mass marketing to consumer targeting. Marketing research has revealed targeting as the future of brand marketing and brand management. P&G believes this

takes much more than a focus group, and they want to spend time with consumers and understand their behaviours.

One of the areas that P&G researches constantly is the in-store experience of the consumer. They see this as another way of connecting with consumers and making their experience a better one. One of the ways they enhance this is by partnering with retailers and developing the in-store experience to please their consumers. Pleasing the consumers has become more difficult today because the consumer has less time and more expectation. Packaging is also important in conveying a message to the consumer. It is a key challenge because labelling has become more complex and consumers are demanding more.

P&G marketing has been innovative and pioneering over the years and one would expect the same from them in the future. They are constantly using marketing research to solve the problems of today and to build brands that will continue to be leaders tomorrow.

Questions:

a) Discuss the role that marketing research can play in helping P&G build its various brands.

b) P&G is considering further increasing its market share. Define the management decision problem.

c) According to the P&G vice president of marketing, cavity and gum protection, whiteness of teeth, taste, fresh breadth and price are all independent variables that affect the preference for a tooth paste brand. Assume that in a survey, each of the leading toothpaste brand is evaluated on each of the independent variable using a 7-point scale with 1 = poor and 7 = excellent. Preference for toothpaste brand is also measured on a 7-point scale with 1 = not at all preferred and 7 = greatly preferred. What statistical technique(s) would you use to answer the following questions:

   (i) Is brand preference related to each of the independent variables considered individually?

   (ii) Is brand preference related to all the independent variables considered simultaneously?