JAIPURIA INSTITUTE OF MANAGEMENT
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Jaipuria Institute of Management, Noida
PGDM/PGDM (SM)/ 2016-18; Term III
End Term Examination

Course Name	**Research Methods in Management (RMM) /RMSM**	Course Code	**GM301**
Max. Time	**2 hours**	Max. Marks	**40**

Note: Attempt all questions.

1. Critically examine and explain the sampling scheme used in the following situations **(2*5)**

a) During the conduct of his survey, Levin chose his respondents by ensuring that they are those who can provide him the needed data for his study. The type of non-probability sampling that he utilized is known as
b) Dr Mehta chooses the elements for his sample by giving particular attention for each sub-population. He sees to it that every computed stratum sample is the same with the other strata and that the respondents are chosen randomly. What sampling design is used?
c) A type of sampling where the required sample and sample per stratum is determined and complied, however, it lacks randomization in the selection of the respondents for the study
d) A department store that wishes to examine whether it is losing or gaining customers, draws a sample from its list of credit card holders by selecting every tenth name.
e) Maria determines her respondents by asking people as to who would be most suited for her study. Through this, she is referred from one respondent to the other. What type of non-probability sampling has been utilized?

2. Read the situation given below and answers the questions given in the end.

MRP Biscuit Company started its operations in Ambala City, Haryana; in 2001.The company was growing at an annual rate of 20 %, which was above the industry average. However, for the last three years, the growth has been only to the tune of 5 to 6 percent. This very factor has been of a main concern to the top management of the company. Mr. P K Malhotra, the senior vice president, marketing, had a meeting of the senior marketing team and was wondering why their company, which has been doing so well, has slowed down in the last few years. During the discussion it was suggested by one of the senior managers to identify the factors which influence the preference for biscuits. It was argued that once these are known, it will help the company to concentrate on those factors accordingly. Therefore, the company decided to get a study done from a research agency to identify the various factors that influence the preference for biscuits.

It was decided to take sample of 40 individuals. Research agency personnel visited various shops nearby in Ambala City. The data was collected on variables like taste, nutrition value, preservation quality, and preference on a 7 pt scale with the higher number indication a more positive rating. The data obtained from the survey has been analyzed and the output is presented in form of following Tables.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.928[a]	.860	.849	.699

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	108.375	3	36.125	73.891	.000[b]
	Residual	17.600	36	.489		
	Total	125.975	39			

a. Dependent Variable: preference

b. Predictors: (Constant), preservation quality, nutrition value, taste

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.733	.301		2.436	.020
	nutrition value	.295	.103	.284	2.865	.007
	Taste	.170	.103	.198	1.655	.107
	preservation quality	.548	.118	.522	4.660	.000

Answer the following questions:

(a) State the management decision Problem for MRP Biscuit Company. **(2)**

(b) State the research problem corresponding to the management decision question. **(3)**

(c) How degree of freedom is calculated in the above table. Differentiate between correlation and regression. **(2)**

(d) Interpret the regression results. As a marketing manager of the biscuit company, on what variables will you concentrate more so as to improve preference of the brand and why? **(8)**

3. A research work is never complete unless a report is written. What are the points to be kept in mind in writing the report? **(5)**

4. The owner of Norton Chain of Resorts wants to determine salient characteristics of the families that have visited a vacation resort during the last two years, so that it may identify the target customers and finally concentrate its advertising campaign. Data were obtained from a sample of - households. The information is collected from a sample of - respondents regarding their attitude towards visiting resorts and spending their vacations, in form of their "likeness to visit the resort in the near future" (1= Low, 5=High). Data were also obtained on annual family income (Income), attitude towards travel (attitude, measured on a nine-point scale), importance attached to family vacations (family vacation, measured on a nine-point scale), house hold size (size), and age of the household head (age) and amount spent on family vacations (amount). The data were also collected regarding their demographic characteristics like gender, educational qualification etc.
The data was analyzed by a software package and output is presented in **Exhibit-I**.

EXHIBIT-I

T-Test

1.1: Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Like to visit the resort in the near future	Male	22	3.1364	1.32001	.28143
	Female	20	2.6500	1.26803	.28354

1.2: Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
Like to visit the resort in the near future	Equal variances assumed	.001	.972	1.215	40	.231
	Equal variances not assumed			1.217	39.868	.231

3. Oneway

2.1: Descriptives

Like to visit the resort in the near future

	N	Mean	Std. Deviation
Intermediate	11	1.9091	1.04447
Graduation	10	2.2000	.91894
PG	11	3.7273	1.19087
Professional	5	3.6000	.89443
Total	37	2.7568	1.29969

2.2: ANOVA

Like to visit the resort in the near future

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	24.920	3	8.307	7.638	.001
Within Groups	35.891	33	1.088		
Total	60.811	36			

Analyze the results from Exhibit-I and comment on the findings and give appropriate suggestions to the management of the Norton, so to target the customers regarding the advertisement of the resort.

(10)