JAIPURIA INSTITUTE OF MANAGEMENT, NOIDA
PGDM / PGDM (M) / PGDM (SM)
THIRD TRIMESTER (Batch 2017-19)
END TERM EXAMINATIONS, APRIL – 2018

Course Name	Research Methods in Management	Course Code	OP-301
Max. Time	2 Hour	Max. Marks	40

INSTRUCTIONS: Answer all questions.

1-Explain the significance of Cronbach alpha to measure internal consistency ("reliability") of multiple Likert questions in a survey/questionnaire that form a scale and you wish to determine if the scale is reliable. Consider any example from your research area to interpret and report Cronbach alpha reliability. (5)

2- Identify with proper reasoning, each of the following scaling technique:

a) What is the difference between data measured on an interval scale and data measured on a ratio scale? (2.5)

b) The order in which participants complete a task is an example of what level of measurement and why? (1.5)

c) Design and identify the appropriate scales for the variable below and give the reasoning for the same. (2*4)

I. fear of crime   II. temperature   III. income   IV. gender

3-Identify with proper reasoning, each of the following sampling methods: (2*4)

a) The population is in an alphabetical order. Starting with the 5th person, every 8th member was selected in the sample

b) A large state was divided into 25 smaller areas. Then five of these were selected at random and the interviews were conducted only in these five areas

c) A sampling technique used in Qualitative research wherein the researcher chooses individuals who are easily accessible to become respondents for the study.

d) Mohan determines her respondents by asking people as to who would be most suited for her study. Through this, he is referred from one respondent to the other. What type of non-probability sampling has been utilized?

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**.

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.

Interpret Independent sample t test table   (4)

Interpret ANOVA Table   (4)

Interpret Descriptive Table   (2)

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

2

2. 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			

5. Critics of television often refer to the detrimental effects that all the violence shown on television has on children. However, there may be another problem. It may be that watching television also reduces the amount of physical exercise, causing weight gains. A sample of 15 ten-year-old children was taken. The number of pounds each child was overweight was recorded. Additionally, the number of hours of television viewing per week was also recorded. The regression analysis has been performed between the variables: overweight amount and the television viewing time. The regression output is given below.

SUMMARY OUTPUT

Regression Statistics

Multiple R	0.87619
R Square	0.76772
Adjusted R square	0. 69731
Standard Error	3.82523
Observations	15

ANOVA

	df	SS	MS	F	Significance F
Regression	1	628.7118	628.7118	42.96703	.0000
Residual	13	190.2215	14.63242		
Total	14	818.9333			

	Coefficients	Standard Error	t Stat	P-value
Intercept	-24.709	4.748057	-5.20403	.00017
X Variable 1	0.967447	0.147591	6.554924	.00000

Identify the independent and dependent variable. Express/model the relationship between the two considered variables. Interpret the kind of relation exists between the variables? (5)