JAIPURIA INSTITUTE OF MANAGEMENT, NOIDA

POST GRADUATE DIPLOMA IN MANAGEMENT

3rd Trimester (Batch 2017-19)

Re- END TERM EXAMINATIONS

(April, 2018)

(SET B)

Course Name	Research Methods in Management/ Research Methods in Services Management	Course Code	OM 301
Max. Time	120 minutes	Max. Marks	40

Q. 1-Identify with proper reasoning, each of the following sampling methods: **(2*5)**

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) Executives were divided into six groups – banking, telecom, insurance, education, consultancy, entertainment. Random samples were taken from each of these groups according to their representation in the population.

d) A super specialist doctor was contacted and he in turn referred us to the next one, who in turn referred us to another one and so on. A study involved the opinion of students of all different classes and sections in a school. It was decided to instead take the opinion of the class representatives and monitors; based on the rationale that they represent the general sentiment of the class at large.

Q.2-One Famous Swiss chocolate brand – is planning to set up its operations in India, starting from three major cities – Delhi NCR, Mumbai and Bangalore.

Before deicing on their product range for the Indian market, it wants to conduct extensive research to understand the tastes and preferences of the Indian kids. Some of the research questions towards their study are:

- What would be the ideal product range for the Indian kids?
- Which variants in terms of flavours, sizes, colours would they prefer?
- How frequently do they purchase chocolates and from where?
- How much money do they spend on chocolates?
- What is the ideal pricing for the various variants and sizes?
- Who takes a decision on when to purchase a chocolate, which brand to purchase etc.
- And most importantly, are there any differences in the preferences of kids in these three cities?

To gain an initial understanding into these research questions, they have decided to conduct personal interviews of kids across these three cities. They have defined their respondent as a child in the age group of 4-12 years. Prepare a questionnaire for these kids. **(5)**

Q.3-Read the situation given below and answer the questions:

Uniflex Inc. is a relatively new player in the plastic extrusion industry. Plastic extrusion companies use granular compounds to make plastic materials for fabrications such as plastic tubing and sheeting. The key to the production of extrusion products is expensive, extrusion machinery used to convert the compounds into material, which can be used in subsequent production processes. Efficient production requires long production runs, necessitating the need for the customer base of conversion companies (Sometimes called fabricators) large enough to support long productions runs. Uniflex Inc. is preparing to aggressively expand over the next two years but needs additional financing for the expansion. They have approached several potential sources for funds, but all the financial sources want some evidence of Uniflex Inc's potential to attract new customers. Uniflex Inc. engaged a local marketing firm to provide this necessary information on market potential.

1-Define the management decision problem.   (2)

2-Define the research problem corresponding to the above problem.   (3)

Q. 4 -Sager, in his research "Shattering the Myths of High-Tech Success", Business Week, June 26, 2007; has shown that in the new fast-paced world of computers, the key factor that separates the winners from the losers is actually how *slow* a firm is in making economic and business decisions: The most successful firms take longer to arrive at strategic decisions on economics of product development, adopting new technologies, developing new products, or reaction towards change in the outward economic conditions. The following values are the number of months to arrive at a decision for firms ranked 'High' (High performing firms), 'Good' (Good performing firms), 'Medium' (Medium performing firms) and 'low' (Low performing firms) in terms of performance.

Analyze the results from the following Exhibit and comment on the research of I.Sager. Also give appropriate recommendations.   (10)

EXHIBIT

Descriptives

Numbers of months to arrive at a strategic decision

	N	Mean	Std. Deviation
High	44	7.075	.811
Good	45	8.064	.677
Medium	33	10.274	.450
Low	37	13.380	.342

ANOVA

Numbers of months to arrive at a strategic decision X

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	118.769	3	39.589	10.761	.000
Within Groups	570.260	155	3.679		
Total	689.029	158			

Multiple Comparisons

Dependent Variable: Numbers of months to arrive at a strategic decision

	Performance of the firm (I)	Performance of the firm (J)	Mean Difference (I-J)	Std. Error	Sig.
Tukey HSD	High	Good	-.888	.227	.153
		Medium	.-989	.222	.000
		Low	-1.683	.327	.000
	Good	High	.888	.227	.153
		Medium	-1.011	.185	.037
		Low	-.795	.303	.014
	Medium	High	.989	.222	.000
		Good	1.01	.185	.037
		Low	-.693	.299	.066
	Low	High	1.683	.327	.000
		Good	.795	.303	.014
		Medium	.693	.299	.066

Q.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

(a) 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)**

(b) Comment on the strength of the relationship between the two considered variables. Is more research needed to find additional independent variables or the model is adequate? **(5)**