K.J. Somaiya Institute of Management Studies & Research Course: PGDM Retail Management– III Trim End Term Exam Sub: Marketing Research

Date of Exam:	31/03/17	Time: 3 Hours	Marks: 50
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NOTES:

- 1. Ensure correct question no. while answering
- 2. Answer any 5. Each question carries equal marks.
- 3. Support your explanation with suitable theory and relevant examples, if reqd.

Que.1. Refer to the survey on student attitude towards data analysis techniques using SPSS and statistics collected from 100 respondents in a given B School. Reduce the data and interpret the factors extracted.

Que.2. A sample survey of home swimming pool owners in southeastern Pennsylvania has yielded the following information.

Respondent	Pool Cost (in Thousands of	Annual Income (in Thousands of
	Dollars)	Dollars)
1	3.6	9.3
2	4.8	10.2
3	2.4	9.7
4	7.2	11.5
5	6.9	12.0
6	8.4	14.2
7	10.7	18.6
8	11.2	28.4
9	6.1	13.2
10	7.9	10.8
11	9.5	22.7
12	5.4	12.3

- a) Compute a linear regression of Y on X. How do you interpret the formula?
- b) Assume next that the survey of swimming pool owners also yielded information on the total size of the pool owner's lot. The data expressed in thousands of square feet appears as follows. Interpret the formula. If you were told that a pool owner had an income of \$12,500 annually and a lot size of 40,000 sq ft, what pool cost would you predict.

Respondent	1	2	3	4	5	6	7	8	9
Lot Size	30.2	40.1	35.3	45.1	38.0	50.1	60.2	100.4	25.1

Respondent	10	11	12
Lot Size	40.7	68.4	60.3

Que.4. Answer any two of the following:

- a) Briefly explain:
 - 1) Two stages in Cluster Analysis
 - 2) Significance of Wilk's Lambda in discriminant analysis.

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b) Discuss how one might modify quota sampling to make it more closely approximate stratified random sampling.

Que.5. Considering the following variables, segment the market with the help of Ward's method and squared Euclidean distances. Justify your answer.

Importance attached to enjoying nature, relating to weather, living in harmony with environment, exercising regularly and meeting other people (V2 to V6)

Que.6. A merchant association for a relatively small shopping center located in a metropolitan area of 150000 population conducted a survey of shoppers. The survey used a self report questionnaire and there were no interviewers present. Rather, the questionnaires were placed in the mall with a sign asking people to participate. The accompanying questionnaire (Refer Page no.4) was used.

a) What response errors are likely to arise? Explain.

b) Revise the questionnaire to better obtain the information being sought.

Que.7. Procter and Gamble, Bangalore Division, an FMCG major, is planning to arm all its TSI (Territorial Sales Inspector) agents with palmtop system. This would enhance their performance as they could book more orders faster and accurately which would help it to compete with its main rival. (HLL has already done the same)

The Bangalore Division has been achieving their sales target for the last two years. Hence the head of the division has decided to recommend the HO to provide all TSIs with latest palmtops.

P & G, Mumbai has decided to use discriminant analysis to screen TSIs of Bangalore Div.on the basis of efficiency and potential to service dealers in their respective territory. The classification will be as potentially unsuccessful (1) and successful (2) TSIs, based on information supplied by the Bangalore Division. In total cases of 24 TSIs are being considered in terms of the above discriminant function in order to find out:

1) Statistical significance of the discriminant function.

2) Which independent variables are relatively better in discriminating between "unsuccessful" and "successful" TSIs?

3) How to classify a future TSI into one of the two groups who has the exp in yrs = 8, sales in rupees per year is 250000 and number of dealers covered is 25.

As an expert, help the division find answers to the above. Data Set is attached below. Independent variables are experience in yrs, sales in rupees per year and number of dealers covered.

Sr No.	Potential	Experience in Years	Sales in Years	Dealers Covered
1	1	5	74500	32
2	2	4	185000	21
3	1	2	115000	29
4	2	7	145600	19
5	1	4	89500	37
6	1	5	79000	31
7	2	4	135000	23
8	1	3	11500	29
9	2	5	152000	25
10	2	7	175000	19
11	1	2	98000	17
12	2	5	130000	27
13	2	8	189500	21

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14	2	5	150000	20
15	1	3	112000	39
16	1	2	94500	30
17	2	3	164500	29
18	1	4	78500	34
19	2	2	125500	17
20	1	5	135000	29
21	1	8	85000	36
22	2	5	105500	21
23	2	8	148500	27
24	1	2	94500	24

	SHOPPER'S SURVET
In an sociation container mation is be sincer	attempt to serve you better, the Martin Mall–Quick Road Merchant's Ho requests that you complete this questionnaire and deposit it in the special marked "Deposit Shopper's Survey Here" located in the Mall. All infor- strictly confidential and you need not sign the Survey. Your cooperation will ely appreciated.
Chack on	e: Male Female
CHECK ON	1 Name of city or town in which you live
	2 How long have you lived there?
	3. Are you buying or renting a home?
	4. How many automobiles in your household?
	5. Husband's occupation?
	6. Wife's occupation?
	7. What is your annual income? (If both husband and wife work, please
	indicate total.)
	8. What is your age?
	9. Number of children in your family?
	10. What are the ages of your children?
	11. What radio station do you listen to most?
	 How often do you shop the Martin–Quick area? (Check one.) Weekly Once or twice a month
	1-6 times a year Only during special sales or events
	13. Do you enjoy shopping the Martin-Quick area? Yes No
	14. In general, how would you rate the people who work the Martin-
	Quick shopping area on courtesy?
	Excellent Good Fair Poor
	15. In general, are you able to find what you are shopping for in the
	16 How much time are hard in the hord
	Quick Road shopping area?

-----All the Best-----