

Code No. 9091

## **FACULTY OF MANAGEMENT**

MBA II – Semester Examination, May / June 2017

**Subject: Research for Marketing Decisions** 

Course No. 2.4

Time: 3 Hours

Max. Marks: 80

PART – A (10x2 = 20 Marks) [Short Answer Type]

Note: Answer all the questions.

- 1. Write short notes on the following.
  - a) Task of marketing research
  - b) Cross-sectional design
  - c) Convenience sampling
  - d) Random number tables
  - e) States of nature
  - f) Pay-off table
  - g) Run
  - h) Null and alternative hypotheses in Mc-Nemar test
  - i) Type II error
  - j) Title page

PART – B (5x12 = 60 Marks) [Essay Answer Type]

Note: Answer all the questions using internal choice.

2 a) Describe the information requirements for a Marketing Decision Support System. Compare and contrast exploratory and causal research designs.

OR

- b) Explain the steps in a research design formulation. Explain the importance of marketing information system.
- 3 a) Explain:
  - i) Experiments and
  - ii) Simulation methods of generating marketing information. Explain Likert's and semantic differential scales with suitable examples.

OR

- b) Discuss the advantages and disadvantages of panels. Describe the sampling design process. What is the relationship between validity and reliability?
- 4 a) The manager of the Gaylord restaurant is promoting an evening special that costs Rs. 30 per dinner and sells for Rs. 50 per dinner. All the dinner specials are prepared in advance and unsold dinners are worthless. Let x represent the daily demand for these dinners and let the probability of x dinners being demanded be given by the function.

$$f(x) = \frac{x-6}{20}$$
 if x = 4, 5, 6, 7  
= 0 Otherwise,



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- i) Construct a conditional payoff table that represents the Gaylord's situation
- ii) Use the EMV concept to determine how many dinners to prepare each day
- iii) How much should the manager be willing to pay to get perfect information regarding the demand for the dinner specials?

- b) Mukesh Engineering Company is currently working with a process which after paying for materials, labour etc., brings a profit of Rs. 10,000. The following alternatives are made available to the company:
  - i) The company can conduct research (R<sub>1</sub>) which is expected to cost Rs. 10,000 having 90% of chances of success. If it proves a success, the company gets a gross income of Rs. 25,000.
  - ii) The company can conduct research (R<sub>2</sub>) which is expected to cost Rs. 5,000 having a probability of 60% success. If successful, the gross income will be Rs. 25.000.
  - iii) The company can pay Rs. 6,000 as royalty of a new process which will bring a gross income of Rs. 20,000.
  - iv) The company continues the current process. Because of limited resources, it is assumed that only one of the two types of research can be carried out at a time. Use decision tree analysis to locate the optimal strategy for the company.
- 5 a) The following are the miles per gallon which a test driver got for 10 tank fulls of each of three kinds of gasoline:

Gasoline A	20	31	24	33	23	24	28	16	19	26
Gasoline B	29	18	29	19	20	21	34	33	30	23
Gasoline C	19	31	160	26	31	33	28	28	25	30

Use Kruskal-Wallis Test to test whether or not there is a difference in the actual average mileage yield of the three kinds of gasoline.

b) The following table of expected frequencies are obtained under normal distribution. Use Kolmogora-Sminnor test to test whether the distribution is normal.

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Test score	51-60	61-70	71-80	81=90	91-100
Observed frequency	30	100	440	500	130
Expected frequency	40	170	500	390	100

6 a) Discuss the nature and scope of oral presentation. What is meant by spatial map? Describe the steps involved in conducting multi-dimensional scaling. How can Regression analysis be used in Conjoint analysis?

b) What guidelines are available for deciding on the number of clusters? How is Cluster analysis used to group variables? What are the steps involved in conducting Discriminant analysis.