AA–3380

Seat No. _____

M. Phil. Examination

April / May – 2003

Management : Paper - I

(Research Methodology)

Time : **3** Hours] [Total Marks : **100**

Instruction : Attempt **all** questions. They carry **equal** marks.

1 Give the true meaning of Research. Write its characteristics. Discuss its various types at length. **25**

OR

1 (a) Distinguish Basic Research and Applied Research giving illustrations. **12**

(b) What is experimental Research Design ? How is it different from Exploratory Research Design ? **13**

2 (a) Discuss unstructured - Undisguised category of questionnaires focusing on the different forms of questions included therein. **12**

(b) Distinguish probability sampling methods from non-probability sampling methods. **13**

OR

2 (a) What is Semantic Differential Scale ? How will you apply it in the field of management ? **12**

(b) Design a questionnaire to study consumer buying behaviour for washing machine. **13**

3 (a) What is consumer price index ? How is it constructed ? What are its uses ? **13**

(b) A marketing agency gives you the following information about the age-group of the sample informants and their liking for a particular model of scooter which a company plans to introduce : **12**

	Age group			
	Below 20	***20-39***	***40-59***	***Total***
Liked	125	420	60	605
Disliked	75	220	100	395
Total	**200**	**640**	**160**	**1000**

On the basis of the above data can it be concluded that the model appeal is independent of the age group of the informations.

Extract from χ^2–table

Degrees of Freedom	1	2	3	4
$\chi^2_{(0.05)}$	3.84	5.99	7.82	9.49

OR

3 (a) What is time series ? Explain various components of time series in detail. **12**

(b) Interpret the following Multiple Regression Model. **13**

Dependent variable : Sales

Predictor	***Coefficient***	***St.dev.***	***t–value***	***p–value***
Constant	6.584	8.542	0.77	0.461
Advertisement	0.625	1.120	0.56	0.591
Cost	2.139	1.147	1.45	0.18

R–Sq = 68.4% d = 2.43.

ANOVA

Source	***DF***	***SS***	***MSS***	***F***	***p–value***
Regression	2	309.99	154.99	9.74	0.006
Error	9	143.20	15.91		
Total	11	453.19			

4 Write short notes on any **three** of the following : **25**

(1) Applications of Summary Measures in Management
(2) Discriminant Analysis
(3) Uses of Factor Analysis
(4) Tools of Bivariate Analysis
(5) Run–Test
(6) Uses of F–test.