(Following Paper ID and Roll No. to be filled in your Answer Books)

Paper ID: 129614

Roll No.

M.A.M.

Theory Examination (Semester-VI) 2015-16

RESEARCH METHODOLOGY

Time: 3 Hours

Max. Marks: 100

Section-A

1. Attempt all questions:

 $(2 \times 10 = 20)$

- (a) What is research?
- (b) Define extraneous variable.
- (c) Define non random sampling.
- (d) What do you mean by consumer panel research?
- (e) What is conclusive research?
- (f) Differentiate between ordinal scale and ratio scale.
- (g) What is quota sampling?
- (h) What do you mean by technical research report?

(1)

P.T.O.

- (i) What do you mean by empirical research?
- (j) What is depth interview?

Section-B

2. Attempt any five questions from this section.

 $(10 \times 5 = 50)$

- (a) Briefly explain the different steps in a research process.
- (b) What do you mean by sampling desing? What points should be taken into consideration by a researcher in a sample design for any research project.
- (c) What are the important steps of data preparation process? Explain in detail.
- (d) What is Chi-Square test? Explain the significance in statistical analysis of any research problem?
- (e) A researcher wants to construct questionnaire for his research. What guidelines will you suggest him to construct a questionnaire?
- (f) Explain the significance of a research report and explain the various steps involved to write research report.

- (g) Write short notes on
 - (a) Popular and technical reports
 - (b) Bibliography
- (h) Discuss a completely randomized design. What is its limitation? How can a randomized block design take care of the limitation of such a design?

Section-C

Note: Attempt all the questions:

 $(3 \times 10 = 30)$

3. By using chi-square test, find out whether there is any association between income level and types of schooling.

Income level	Public school	Govt. School
Low	200	B 400
High	1000	400

Test at 5% level of significance.

4. A soap manufacturing company was selling a particular type of brand through a large number of retail shops. Before a heavy advertisement campaign, the average sale per week per shop was 140 dozens.

(3) P.T.O.

After the campaign, a sample of 26 shops was taken and the average sales per week per shop was found to be 147 dozens with a standard deviation of 16 dozens. Do you consider that the advertising campaign was effective? Use t-test either at 5% or 1% level to answer this question.

Degree of freedom	21	22	23	24	25
t (0.05)	2.080	2.074	2.069	2.064	2.060
t (0.01)	2.831	2.819	2.807	2.797	2.787

5. An economist is interested in estimating the average monthly households expenditure on food items by the households of a town. Based on past data the population on the monthly expenditure on food item is Rs. 30 with allowable error set at rs. 7, estimate the sample size required at a 90% confidence.