<b>Seat No.:</b>	
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# **AL-127**

## April-2016

### M.Sc., Sem.-VI (CA & IT)

# **Research Methodology**

Time: 2 Hours [Max. Marks: 50

**Instruction:** Non-programmable Scientific Calculator can be used.

1. What do you mean by Research? Explain it's significance in modern times.

OR

Write short note on Qualitative and Quantitative Approaches of Research.

2. State different method for collecting primary data. Explain any two of them.

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#### OR

Distinguish between probability and non-probability sampling.

3. Explain Research process with diagram.

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4. "Interpretation is an art of drawing inferences, depending upon the skill of the researcher". Elucidate the given statement explaining the technique of interpretation.

### OR

Explain in detail different steps involved in writing the report.

5. Attempt the following:

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(A) The following information is obtained concerning an investigation of 50 ordinary shops:

	Shops			
	In town A	In town B	Total	
By Men	18	17	35	
By Women	12	03	15	
Total	30	20	50	

Can it be interfered that shops run by women are relatively more in town B than in town A? Use  $\chi^2$ -test. ( $\chi^2_{(1.0.05)} = 3.841$ ).

(B) A simple Random sampling survey in respect of monthly earnings of semi-skilled workers in two cities gives the following statistical information:

Cities	Mean	Stand. Deviation	Size of Sample
A	14	3.667	7
В	11	6	5

Is there any evidence difference in monthly earnings of the two cities? Use 5% level of significance for testing this difference between the means of two samples. ( $T_{tab} = 1.812$ )

OR

5. Set-up an analysis of variance table for the following data. Find out whether the difference in the means of the production of crops of the plot is significant or not. 10

A	В	C	D
8	9	3	3
12	4	8	7
01	7	2	8
03	1	5	2

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