

**STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI – 600 086**  
**(For candidates admitted during the academic year 2011-12)**

**SUBJECT CODE : 11CS/PC/RM44**

**M. Sc. DEGREE EXAMINATION, APRIL 2013**  
**INFORMATION TECHNOLOGY**  
**FOURTH SEMESTER**

**COURSE : CORE**  
**PAPER : RESEARCH METHODOLOGY**  
**TIME : 3 HOURS**

**MAX. MARKS : 100**

**SECTION - A**

**Answer all the following:**

**(10 x 2 = 20)**

1. What is Research?
2. What is the need for Research Design?
3. What are the Data Collection Methods?
4. What is cumulative Frequency Distribution?
5. What is Hypothesis Testing?
6. Define Factor analysis.
7. How to summarize the data with database using statistical methods?
8. What are the types of Report?
9. How to check the compatibility with all word processing programs.
10. How to enrich the bit by adding adjectives or adverbs.

**SECTION - B**

**Answer any six of the following:**

**(6 x 5 = 30)**

11. Explain in detail about objectives and motivation of Research.
12. What is research design? Explain in detail about the different research designs.
13. How to collect data using observation method and mail survey.
14. Explain about the internal and external sources of secondary data.
15. Brief on Hypothesis testing. Explain one tailed and two tailed test concerning single proportion.
16. Compare one sample tests and two sample tests.
17. Explain Report writing in detail.
18. Explain about improving english vocabulary using the sophisticated dictionary.

**SECTION - C****Answer any five of the following:****(5 x 10 = 50)**

19. Describe about Research Methodology. Explain about the types of Research in detail.
20. Explain questionnaire design in detail.
21. Explain primary data collection methods in detail.
22. Differentiate between Whitney U test and K-sample test.
23. Explain in detail about research process.
24. Explain briefly about mastering report writing tools.
25. Children of three age groups are asked to indicate their preference for three photographs of adults. Do the data suggest that there is a significant relationship between age and photograph preference? What is wrong with this study? [chi square – 29.6, with 4 d.f. :  $p < 0.05$ ]

<b>Age</b>	<b>Photograph</b>		
	<b>A</b>	<b>B</b>	<b>C</b>
5-6 years	18	22	20
7-8 years	2	28	40
9-10 years	20	10	40

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