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

SUBJECT CODE : 11CS/PC/RM44

M. Sc. DEGREE EXAMINATION, APRIL 2014
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. List the objectives of research.
2. Differentiate between quantitative and qualitative research.
3. How is primary data different from secondary data?
4. List down the characteristics that the secondary data should possess.
5. What is Null and Alternate hypothesis?
6. Give the use of dendrogram.
7. What is Goalseek?
8. What is histogram?
9. How do you access professional styles?
10. Give any one grammar software. What is its use?

SECTION - B

Answer any six of the following: **(6 x 5 = 30)**

11. Explain the qualities of good research.
12. Discuss the techniques in defining a research problem.
13. Write short notes on structured and unstructured interview.
14. Discuss the different types of chart that can be used for research.
15. Weight of 10 students is as follows.

S. NO.	1	2	3	4	5	6	7	8	9	10
Weight (kg)	38	40	45	53	47	43	55	48	52	49

Can we say that the variance of the distribution of weight of all students from which the above sample of 10 students was drawn is equal to 20 kgs? Test this at 5 percent and 1 percent level of significance.

16. Explain one way (or single factor) ANOVA.
17. Give the different steps in writing report.
18. Discuss the various ways to enrich the text in report writing using report writing tool.

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SECTION - C

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

19. Discuss the important concepts relating to Research Design.

20. Explain the basic principles of experimental design.

21. Discuss in detail about the different ways of collecting primary data.

22. a. A survey was taken on Maple AVENUE. In each 20 homes, people were asked how many cars were registered to their household. The results were recorded as follows.
1, 2, 1, 0, 3, 4, 0, 1, 1, 1, 2, 2, 3, 2, 3, 2, 1, 4, 0, 0.
Present the data in a frequency distribution table.

b. At a recent chess tournament, all 10 of the participants had to fill out a form that gave their names, address and age. The ages of the participants were recorded as follows.
36, 48, 54, 92, 57, 63, 66, 76, 66, 80.
Create a cumulative frequency distribution table for the given data.

23. Write in detail about cluster analysis and clustering methods.

24. Explain the different types of research reports.

25. Explain in detail about layout of report.

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