 LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

**M.Sc.** DEGREE EXAMINATION - **MEDICAL LAB. TECHNOLOGY**

SECOND SEMESTER – APRIL 2011

# ML 2953 - METHODOLOGY OF MEDICAL LABORATORY RESEARCH

Date : 12-04-2011 Dept. No. Max. : 100 Marks

Time : 1:00 - 4:00

Section A

Answer **ALL** the questions (10x2 = 20 Marks)

1. What is a peer reviewed journal?
2. What is the need for review of literature?
3. List down the criteria essential for impact factor.
4. What are review volumes?
5. Define patenting.
6. What is thrust area?
7. What is plagarism?
8. Categorise the reagents in a laboratory?

9. Calculate the arithmetic mean from the following data

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| No of students | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Marks | 38 | 40 | 85 | 55 | 88 | 54 | 100 | 85 | 77 | 53 |

1. Find out the median of the following data

10 18 15 13 54 19 17

Section B

Answer any **FOUR** of the following (10×4 = 40 Marks)

1. Elaborate the electronic tools for collection of literature.
2. Give an account of the different kinds of research programme in India and abroad.
3. What are the issues related to ethics in research?
4. Calculate standard deviation of the following data

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| X | 1 | 3 | 5 | 7 | 9 | 11 |  |  |
| F | 4 | 6 | 5 | 5 | 8 | 2 |  |  |

1. Calculate the coefficient of correlation between x and y from the following data:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| x | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| y | 2 | 4 | 5 | 3 | 8 | 6 | 7 |

1. What are the guidelines to write results and discussion?

Section C

Answer any **TWO** of the following (20×2 = 40 Marks)

1. What is research? Discuss the different types of research.
2. How to write a paper for a scientific journal? Explain
3. Explain research process with a neat flowchart.
4. Discuss in detail good laboratory practices.

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