

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

**SUBJECT CODE: 11BI/PE/RM24**

**M. Sc. DEGREE EXAMINATION, APRIL 2012**  
**BIOINFORMATICS**  
**SECOND SEMESTER**

**COURSE: ELECTIVE**

**PAPER: RESEARCH METHODOLOGY AND SCIENTIFIC COMMUNICATION**

**TIME: 3 HOURS**

**Max.Marks: 100**

**SECTION – A**

**I Choose the correct answer**

**(5x1=5 marks)**

1. Which of the following orders is the recommended in the flowchart of the development of a research idea?
  - a) Research topic, research problem, research purpose, research question, hypothesis
  - b) Research topic, research purpose, research problem, research question, hypothesis
  - c) Research topic, research problem, research purpose, research question, hypothesis
  - d) Research topic, hypothesis, research problem, research question, research purpose
  
2. A title of a table should
  - (a) be a complete sentence
  - (b) brief, clear, complete and unique
  - (c) give any background information
  - (d) contain unnecessary words
  
3. The science of arranging events in their order of occurrence in time is known as  

---

  - (a) Chronology
  - (b) Dendrochronology
  - (c) Horology
  - (d) Timeline study

4. When more than attributes, e.g., nationality, age and religion, are used for classification, then it is called as \_\_\_\_\_ classification.
- (a) Simple
  - (b) Quantitative
  - (c) Manifold
  - (d) Spatial
5. The project design consists of two elements \_\_\_\_\_ and \_\_\_\_\_.
- (a) project idea and setting hypothesis
  - (b) planning and proposal writing
  - (c) title and evaluation
  - (d) interpretation and writing thesis

**II Expand the following :**

**(5x1=5 marks)**

- 6. IPR
- 7. MLA format
- 8. ELSI
- 9. CAFÉ
- 10. TRIPS

**III Define the following:**

**(5x2 =10 marks)**

- 11. Primary Data
- 12. Ethics in research
- 13. Archives
- 14. Research design
- 15. Sampling

**SECTION – B**

**(4x10=40 marks)**

Answer any **FOUR** questions.

- 15. Enumerate the various ways of collecting data for research.
- 16. Differentiate between qualitative and quantitative research.

17. Distinguish between Research methods, Research techniques and scientific thinking  
Research methodology.
18. Define research process and explain the different types of research processes.
19. What is literature review? How is it done scientifically and at what stage of research?
20. Discuss the main points involved in writing a thesis or dissertation
21. Mention the importance of Intellectual Property Rights.

**SECTION – C**

**(2x20=40 marks)**

**Answer any TWO Questions**

22. Write a proposal for grant from a scientific organization justifying your demand.
23. Discuss the various means of collecting data from electronic sources and what the  
measures are to ensure the quality of information with CARS checklist?
24. Discuss the case studies on Patents with reference to turmeric.
25. Explain the research guidelines in paper critiquing.

\*\*\*\*\*