## Ph. D. (LIFE SCIENCES) (PHDLS)

## Term-End Examination December, 2024

**RLS-101: RESEARCH METHODOLOGY** 

Time: 3 Hours Maximum Marks: 100

Note: (i) Answer any five questions from Q. Nos. 1 to 8.

- (ii) All questions carry equal marks.
- (iii) Give examples, wherever necessary to support your answer.
- Discuss the criteria of a good research. How a student can be motivated extrinsically and intrinsically to do a good piece of research work?
- (a) Explain the meaning and significance of a research design.
  - (b) Discuss important research designs used in experimental hypothesis-testing research study.

| 3. | (a) | What are the basic postulates of scientific         |
|----|-----|---|
|    |     | method? Explain, how are they related to            |
|    |     | scientific research. 10                             |
|    | (b) | "Research is much concerned with fact-              |
|    |     | finding, analysis and evaluation."                  |
|    |     | Comment on this statement. 10                       |
| 4. | Wh  | at are the <i>two</i> basic approaches of research? |
|    | Wh  | y is it important to know how research is           |
|    | don | e? 20   |
| 5. | Wh  | at is bioethics? Discuss with examples the          |
|    | nee | d for bioethics in research.                        |
| 6. | (a) | What is Plagiarism? What steps should be            |
|    |     | taken to avoid plagiarism in thesis                 |
|    |     | writing?  |
|    | (b) | Which techniques should be employed in              |
|    |     | writing a review article and a report? 10           |
|    |     | writing a review article and a report:              |
| 7. | Wri | te short notes on any <i>four</i> of the following: |

- (a) Ex-post facto research
- (b) Objectives of research
- (c) Research techniques

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- (d) Hypothesis in research
- (e) Annotated bibliography
- (f) Empirical research
- 8. (a) What do you mean by "Sample Design"?

  What points should be taken into consideration in developing research project?
  - (b) Explain different steps in sample design.10