F 2339

Reg. No.....

Name.....

# Ph.D. COURSE WORK EXAMINATION, OCTOBER 2022

#### Course I-RESEARCH METHODOLOGY

(I-Common to the Stream : Science, Technology and Applied Sciences and Engineering Technology)

[2020 Admissions]

Time : Three Hours

Maximum : 50 Marks

#### Part A

### Answer any ten of the following questions. Each question carries 4 marks.

- 1. Discuss in brief about the objectives of research.
- 2. Write a note on research method with respect to Scientific method vs Arbitrary Method.
- 3. What are the points to be considered while selecting a research problem ? Explain the process of problem formulation.
- 4. Summarize the literature review functions in research work and state the way in which it can help research.
- 5. What is correlation ? Explain its Characteristics and applications.
- 6. Explain different sources of Secondary data for research. What are the precautions to be taken while using secondary data ?
- 7. Discuss the types of hypotheses. Narrate the steps involved in testing of hypothesis.
- 8. Explain what cautions needs to be exercised in interpretation of data.
- 9. Differentiate between oral and poster presentation.
- 10. Explain, how the Impact factor of a journal is calculated.
- 11. Give the importance of IAEC in the field of biological research.
- 12. Write a short note on application of MS office in research.

 $(10 \times 4 = 40 \text{ marks})$ 

## Part B

### Answer any one question from the following. The question carries 10 marks.

- 13. What is plagiarism ? Differentiate it from self-plagiarism. Name any two tools used to check it. State the basic principle behind these tools.
- 14. Explain in detail the various methods of collecting data.

 $(10 \times 1 = 10 \text{ marks})$