PHMBL1

Ph.D Course Work Examinations, July-2023

MICROBIOLOGY

Course-I: Research Methodology

Time: 3 Hours

Max. Marks: 70

Instruction: Answer all Section

SECTION-A

- I. Write Short Notes on any Five of the following Questions in about One and Half Page Each (5x5=25)
 - 1. NCBI
 - 2. Plagiarism
 - 3. Orthogonal array
 - 4. Multiple Sequence alignment and Phylogenetic tree
 - 5. IPR
 - 6. ANOVA
 - 7. Trademarks

SECTION-B

II. Answer any Three of the following Questions in about Three Pages Each (3x10=30)

- 8. Presentation tools
- 9. Probability & Sampling distribution
- 10. Correlation and Regression
- 11.Use of Internet & www
- 12.DDBJ and Swissprot
- 1. 11. Protection of GMO's
- 13. Principle and types of microarray

SECTION-C

III. Answer any ONE of the following Questions in about Four Pages Each (1x15=15)

- 14. Write a detailed note on different sampling techniques and components of a research proposal.
- 15.Discuss the patent filing procedures in detail.