

Ph.D Course Work Examinations, July-2023

MICROBIOLOGY

Course-III: Microbiology

Time: 3 Hours

Max. Marks: 70

Instructions: all sections are compulsory

SECTION-A

I. Write Short Notes on any Five of The Following Questions in about One and Half Page Each

(5×5=25)

1. AFM
2. DNA fingerprinting
3. Microbial bioprospecting
4. Exogenous antigen processing
5. Biopesticides
6. Immobilization Techniques
7. Solid waste management

SECTION-B

II. Answer any Three of the Following Questions in about Three Pages

(3× 10=30)

8. Explain the working principle of HPLC
9. Derive Michaelis-Menten equation
10. Discuss the classification and mechanism of action of vaccines
11. Explain strategies for generation of pest resistant crops and its mechanisms
12. Discuss the mechanism of bioleaching

Section-C

III. Answer Any One of the Following Question in about Four Pages

(1×15=15)

13. Explain in detail design and construction of fermenter. Add a note on different types of fermenter
14. Explain in detail different types of hypersensitivity and their implications
