## PHBOT4

# Ph.D Course Work Examinations, July-2023

#### **BOTANY**

## Course-IV: B. Plant Systematics and Phytotherapy Research

Time: 3 Hours Max. Marks: 70

**Instructions: All sections are compulsory** 

#### SECTION - A

### I. Write a short note on any FIVE of the following

 $5 \times 5 = 25$ 

- 1. Soxhlet extraction.
- 2. TLC.
- 3. Clinical Pharmacology.
- 4. HPLC.
- 5. Chemotaxonomy.
- 6. Monograph.
- 7. Bioluminescence.

#### SECTION - B

#### II. Answer any THREE of the following

 $3 \times 10 = 30$ 

- 8. Explain the procedure for genomic DNA isolation.
- 9. Write a procedure for Bioautography and its application.
- 10. What is nanobiotechnology, write a note on its role in drug delivery.
- 11. Write a procedure for protease viability marker assay.
- 12. Give a brief account of clinical Pharmacology.

#### **SECTION - C**

#### III. Write an essay on any ONE of the following

 $1 \times 15 = 15$ 

- 13. Discuss in detail methods to validate active compounds having anticancer properties.
- 14. Elaborate on the construction of the genomic library.

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