

PHBOT4

Ph.D Course Work Examinations, July-2023

BOTANY

Course-IV: A. Phytochemistry and Molecular Biology

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 X 5 = 25**

1. Hot extraction process
2. Restriction digestion
3. DDBJ
4. Multiple sequence alignment
5. Gas chromatography
6. Clinical Pharmacology
7. Ligation

SECTION – B

II. Answer any THREE of the following **3 X 10 =30**

8. Explain the steps involved in gene cloning
9. Describe the isolation of plasmid DNA by alkaline lysis method
10. Write a note on Pharmacokinetics
11. Explain the principle and application of Soxhlet extraction
12. Give a brief account of protein databases

SECTION – C

III. Write an essay on any ONE of the following **1 X 15 =15**

13. Explain the principle and applications of Agarose Gel Electrophoresis
14. Describe the various types of routes of drug administration
