

M.Sc. 4th Semester Examination, 2025

BOTANY

(Microbiology : Applied)

PAPER—BOT-495E

(Practical)

Full Marks : 25

Time : 5 hours

Answer all questions

The figures in the right hand margin indicate marks

Perform the following experiments. Write down principle, requisition, result and comment of each experiment in answer script

1. Identify the unknown amino acid (A) by TLC using standard M and N.

6

(Turn Over)

(2)

2. Prepare a phylogenetic tree using the supplied nucleotide sequence (B) [Soft copy of the sequence will be supplied] using online BLAST. 6

Or

Isolate *Azotobacter* from the supplied soil sample(S). 6

3. Estimate concentration of protein present in supplied sample (C). 6

Or

Estimate concentration of DNA present in supplied sample (D). 6

4. Laboratory note book. 3

5. Viva voce. 4