

2025

M.Sc. 3rd Semester Examination

ZOOLOGY

PAPER : ZOO-308

**(Entomology, Ecotoxicology, Molecular Evolution
and Microbiology)**

(Practical)

Full Marks : 50

Time : Five Hours

The figures in the margin indicate full marks.

Answer *all* questions.

1. Prepare and identify the bacteria from the given sample using Gram staining technique. Write down the procedure in brief. Draw a diagram of the microscopic observation.
3+5+2
2. Observe the provided cultured samples through multiple tube fermentation method and comment on the results. Draw the scheme of enumeration of coliforms. 5+3
3. Find out the LC_{50} value for the given data with suitable comments on your findings. 10
4. Identify the following legs of honey bee and comment on respective behavioural modifications.

A

B

3×2=6

P.T.O.

(2)

OR

Dissect the sting apparatus of the given specimen.

5. Identify the order of the following insects providing key characteristics.

A	B	C	2×3=6
---	---	---	-------

6. Laboratory Notebook.	5
-------------------------	---

7. Viva-voce.	5
---------------	---
