## K-538

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# **MZO-609A**

#### APPLIED ENTOMOLOGY

M.Sc. Zoology (MSCZO)

4th Semester Examination, 2023 (Dec.)

Time: 2 Hours] [Max. Marks: 35]

Note: This paper is of Thirty Five (35) marks divided into two (02) Sections A and B. Attempt the questions contained in these sections according to the detailed instructions given therein. Candidates should limit their answers to the questions on the given answer sheet. No additional (B) answer sheet will be issued.

#### SECTION-A

(Long Answer Type Questions)

Note: Section 'A' contains Five (05) long answer type questions of Nine and Half (9½) marks each. Learners are required to answer any Two (02) questions only.

(2×9½=19)

- **1.** What is sericulture? Describe the important species of silkworm, their rearing techniques and natural enemies.
- 2. Discuss the culture of lac insect, host plant and by products.
- **3.** Describe the life cycle of cockroach in brief and add a note on its distribution, damage and control measures.
- **4.** Write an essay on forensic entomology. How insects are useful in solving murder cases and crime investigations?
- **5.** Explain the social organization and caste differentiation in termites in details.

#### **SECTION-B**

### (Short Answer Type Questions)

**Note:** Section 'B' contains Eight (08) short answer type questions of Four (04) marks each. Learners are required to answer any Four (04) questions only. (4×4=16)

- **1.** What is royal jelly? explain its importance for social bees.
- **2.** What is nuptial flight?
- **3.** What is Nabokov scent gland?

- **4.** Enumerate the ticks affecting livestock. Comment on the direct and indirect effects of ticks.
- **5.** What is a bee foraging and communication?
- **6.** Comment on shaft louse.
- 7. Are aquatic insects bioindicators? Discuss it.
- **8.** Define Urban entomology with examples.