A-0113

Total Pages: 3 Roll No.

MZO-602

M.Sc. ZOOLOGY (MSCZO)

(Toxicology-II, Newer Insecticides & Metabolism)
3rd Semester Examination. Session December 2024

Time: 2:00 Hrs. 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 $2 \times 9 \frac{1}{2} = 19$

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.

- Describe the chemical structure and mode of action of Neonicotinoids.
- 2. What is photodegradation ? Explain photodegradation of pyrethrins.
- 3. Describe the mode of action of the microsomal monooxygenases.
- 4. What are the different mechanisms involved in the development of insecticide resistance among insects?
- 5. Describe the principle and method of pesticide residue analysis by chromatography.

Section-B

Short Answer Type Questions $4 \times 4 = 16$

- **Note:** Section 'B' contains Eight (08) Short-answer type questions of Fourth (04) marks each. Learners are required to answer any *four* (04) questions only.
- 1. Write short notes on the following:
 - (a) Sex pheromones
 - (b) Insect growth regulators
- 2. What are Non-monooxygenase enzymes?
- 3. What do you understand by integrated pest management?

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- 4. Differentiate between type I and type II pyrethroids. ,
- 5. Write about Insect Repellents and Insect chemosterilants.
- 6. Differentiate between Bioaccumulation and Biomagnification.
- 7. Briefly explain the effect of pesticide residue on human beings and environment.
- 8. What is Composting?
