# K-532

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# **MZO-602**

### Toxicology-II, Newer Insecticide & Metabolism

M.Sc. Zoology (MSCZO)

3rd 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.

 $(2\times9\frac{1}{2}=19)$ 

- 1. Describe the structure, toxicity and mode of action of DDT.
- **2.** Describe the principles and methods of pesticide residues analysis.
- 3. What do you understand by insecticide resistance in insect? List various factors conducive to rapid development of insecticide resistance in insect.
- **4.** Explain various reactions involve in metabolism of insecticides.
- **5.** Describe insect mono-oxygenase systems.

#### **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 photodegradation of pyrethrins?
- **2.** Write about the effect of pesticide residue on environments.
- **3.** Give brief account of factors affecting monooxygenase activity.

- **4.** Write a short note on :
  - (a) Insect repellent.
  - (b) Bioconcentration.
- **5.** What is the role of detoxication enzymes in insecticide resistance?
- **6.** Write a short note on development of synthetic pyrethroids.
- 7. What are Sex pheromones?
- **8.** Write about mode of action of neonicotinoids.