

**C295**

Total Pages : 3

Roll No. ....

**MZO-602**

**Toxicology-II Newer Insecticide & Metabolism**

M.Sc. Zoology (MSCZO-20)

3rd Semester Examination, 2022 (June)

**Time : 2 Hours]**

**Max. Marks : 40**

**Note :** This paper is of Forty (40) marks divided into two (02) Sections A and B. Attempt the questions contained in these sections according to the detailed instructions given therein.

**SECTION-A**

**(Long Answer Type Questions)**

**Note :** Section 'A' contains Five (05) long answer type questions of Ten (10) marks each. Learners are required to answer any Two (02) questions only.

(2×10=20)

1. Write the short note on any two :

(a) Principle of Chromatography.

(b) Insect growth regulators.

- (c) Microbial metabolic pathway.
  - (d) Sex pheromones.
2. Explain the effects of pesticide residues on human beings, environment and non-target organisms.
  3. What are the various factors that are responsible for the selective toxicity of carbamate insecticides?
  4. What do you understand by cytochrome p-450?
  5. Write the short notes on any two :
    - (a) Neonicotinoids.
    - (b) Insect Repellents.
    - (c) Fumigants.
    - (d) Organophosphate.

### **SECTION-B**

#### **(Short Answer Type Questions)**

**Note :** Section 'B' contains Eight (08) short answer type questions of Five (05) marks each. Learners are required to answer any Four (04) questions only. (4×5=20)

1. Explain the chemical structure and toxicity of Pyrethroids.
2. Write an essay on the use of insect attractants.

3. What are the various objectives of pesticide residue analysis?
  4. What do you understand by the Type I and Type II Pyrethroids?
  5. Explain the induction of detoxication enzymes.
  6. Explain the Biomagnification of pesticide residues.
  7. Describe the thin layer chromatography (TLC).
  8. Explain the Juvenile hormone mimics with example.
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