

Roll No.

ZO–553

Toxicology

M.Sc. ZOOLOGY (MSCZO-12)

Second Year, Examination, 2018

Time : 3 Hours

Max. Marks : 80

Note : This paper is of **eighty (80)** marks containing **three (03)** Sections A, B and C. Attempt the questions contained in these Sections according to the detailed instructions given therein.

Section–A

(Long Answer Type Questions)

Note : Section ‘A’ contains four (04) long answer type questions of nineteen (19) marks each. Learners are required to answer *two* (02) questions only.

1. What is Insecticides ? Describe their function and classification.
2. Describe the pesticides residues and their effect on human beings and environment.
3. Describe composition and biological activity of botanical insecticide “Neem” and their mode of action and toxicity.
4. What is microsomal mono-oxygenases ? Explain their mode of action and affecting factors.

(B-71) P. T. O.

Section-B**(Short Answer Type Questions)**

Note : Section 'B' contains eight (08) short answer type questions of eight (08) marks each. Learners are required to answer *four* (04) questions only.

1. Explain the types of chromatography.
2. A short note on Neurotransmitters.
3. Explain the photodegradation of pyrethrins.
4. Explain the organophosphates.
5. Write a short note on D. D. T.
6. Describe the mode of action of Nicotinoids.
7. Describe how is the acetylcholine synthesized.
8. Explain the effect of physical agents on cuticle.

Section-C**(Objective Type Questions)**

Note : Section 'C' contains ten (10) objective type questions of one (1) mark each. All the questions of this Section are compulsory.

1. "Elements of Economic Entomology" book is related with :
 - (a) V. R. David (2002)
 - (b) A. S. Perry (2004)
 - (c) R. Mishra (2008)
 - (d) C. K. Clore (2005)

2. “Dri-die 67” was much more effective against :
 - (a) Drywood termites
 - (b) Fungus
 - (c) Silver fish
 - (d) Flies
3. The most common chemical transmitter is :
 - (a) Benzene
 - (b) DDT
 - (c) Acetic acid
 - (d) Acetylcholine
4. A major effect of DDT on channels.
 - (a) Na^+
 - (b) Pb^{++}
 - (c) Fe^{++}
 - (d) Cd^{++}
5. “Pyrethrum” refers to the toxic constituents of dried and powdered flower heads of :
 - (a) *Pisum*
 - (b) *Pyrethrum*
 - (c) *Chrysanthemum*
 - (d) *Daucus*
6. Insecticidal properties of DDT were discovered in 1939 by :
 - (a) S. K. Jain
 - (b) P. Muller
 - (c) R. Brown
 - (d) O. Zeidler

7. was first prepared by Michael Faraday in 1825.
- (a) DDT
 - (b) Hexa Chlorocyclohexane
 - (c) Ethanol
 - (d) Lindane
8. One nanogram is equal to :
- (a) 10^{-12}
 - (b) 10^{-8}
 - (c) 10^{-9}
 - (d) 10^{-19}
9. did the first systematic study and recognized as the beginning of chromatography.
- (a) M. Tswett
 - (b) M. Jackson
 - (c) Lederberg
 - (d) Zimmerman
10. Cytochrome P – 450 in the liver is present in greatest quantity in the smooth endoplasmic reticulum.
- (a) Arthropodian
 - (b) Mammalian
 - (c) Birds
 - (d) Crocodile