

**S-770**

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. Describe the effects of Insecticides on the Nervous system.
2. What are the Retenone and Rotenoids ? Explain their chemical structure and mode of action.
3. Write an essay on Carbamate insecticides.
4. Explain the effects of pesticide residues on human beings, environment and non-target organisms.

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

**Note :** Section ‘B’ contains eight (08) short answer type questions of eight (8) marks each. Learners are required to answer *four* (04) questions only.

1. What are the different criteria for classifying insecticides ?
2. What are the various acute tests for assessing toxicity of Poisons ?
3. What procedures should be adopted to treat the organophosphorus poisoning ?
4. What do you understand by the type-I and type-II pyrethroids ?
5. Explain the mode of action of Nicotinoids.
6. Explain the use of insect attractants.
7. Describe the photodegradation of Pyrethrins.
8. What do you understand by Cytochrome P-450 ?

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

**Note :** Section ‘C’ contains ten (10) objective type questions of one (01) mark each. All the questions of this section are compulsory.

Choose the correct answer :

1. Chemical active ingredient Azadirachtin is obtained from ..... .
  - (a) Neem
  - (b) Cauliflower
  - (c) Mango
  - (d) Aloe vera

2. 'Sarcomas' are cancer of :
  - (a) Epithelial tissues
  - (b) Connective tissues
  - (c) Muscle tissues
  - (d) Nervous tissues
  
3. 'Insecticide Act' is related with :
  - (a) 1988
  - (b) 1958
  - (c) 1998
  - (d) 1968
  
4. 'Nimbin' and 'Nimbidin' compounds show :
  - (a) Antiviral activity
  - (b) Antibacterial activity
  - (c) Fungal activity
  - (d) Anti Cancerous activity
  
5. One picogram (pg) is denote as :
  - (a)  $10^{-6}$  gm
  - (b)  $10^{-9}$  gm
  - (c)  $10^{-10}$  gm
  - (d)  $10^{-12}$  gm
  
6. Gas chromatography concept was firstly developed by :
  - (a) Martin & Synge
  - (b) Laderberg & Tatum
  - (c) Watson & Crick
  - (d) Singer & Nicolson

7. 'Hexacyclohexane' (HCH) was first prepared by :
- (a) Michael Faraday (1825)
  - (b) John Ray (1839)
  - (c) J. P. Muller (1935)
  - (d) G. Schrader (1795)
8. In general waxes are composed of hydrocarbons of ..... carbon chain length.
- (a) 10-15
  - (b) 12-31
  - (c) 30-45
  - (d) 5-15
9. 'Typhoid' disease is caused by :
- (a) Virus
  - (b) Bacteria
  - (c) Fungus
  - (d) Algae
10. 'Curd' is obtained by :
- (a) *Lactobcillus* bacteria
  - (b) *Salmonella* bacteria
  - (c) *Nitrosomonas* bacteria
  - (d) *Clostridium* bacteria