Total No. of Questions: 6 *Total No. of Printed Pages:2*

Enrollment No.....

Faculty of Agriculture

End Sem (Even) Examination May-2019

AG3CO13 Fundamentals of Entomology

Programme: B.Sc. (Ag.) Branch/Specialisation: Agriculture

Duration: 3 Hrs. **Maximum Marks: 50**

Note: All questions are compulsory. Internal choices, if any, are indicated.Answers of Q.1 (MCQs) should be written in full instead of only a, b, c or d.

Q.1 i. The largest class of the phylum arthropoda. **1**
(a) Crustacea (b) Arachnida (c) Insecta (d) Symphyla

ii. Generally, insects have ___ pair of legs **1**
(a) 3 (b) 2 (c) 1 (d) 4

iii. Scientific study of insects with surrounding environment is known as **1**
(a) Insect morphology (b) Insect Ecology
(c) Insect anatomy (d) Insect cytology

iv. Insects survive by eating other living animals through hunting, sucking blood or as internal parasite are called. **1**
(a) Herbivores (b) Carnivores (c) Omnivores (d) None of these

v. The concept of Integrated pest management (IPM) was first given by **1**
(a) Langstroth (b) Stern and Stern
(c) Geierr and Clark (d) Smithwell

vi. In this method we used insecticides, attractants, repellents, growth inhibitors. **1**
(a) Chemical methods (b) Physical methods
(c) Biological methods (d) Legal methods

vii. Insecticide Act was come in this year. **1**
(a) 1968 (b) 1868 (c) 1768 (d) 1928

viii. Which insecticide is systemic insecticide. **1**
(a) Phorate (b) Dimethoate
(c) Carbaryl (d) All of these

ix. Scientific name of any insect pest consists. **1**
(a) Genus & family (b) Genus & species
(c) Order & family (d) Order &species

P.T.O.

x. Mostly moths and butterfly belongs to the order. **1**
(a) Hemiptera (b) Orthoptera (c) Diptera (d) Lepidoptera

Q.2 i. Term Entomology & Arthropoda has been derived from which word respectively. **1**

ii. Write the four characters of class insect. **2**

iii. Write the modification/types of insect antennae with example. **5**

OR iv. Write the modification of insect's mouthparts with example. **5**

Q.3 i. Write the name of abiotic factors of environment. **1**

ii. Define insect ecology and relation with agriculture entomology. **3**

iii. Write the effect of temperature, moisture, rainfall and light on insects. **4**

OR iv. What is the importance of insect ecology branch in agriculture entomology? **4**

Q.4 i. Write the definition of Integrated Pest Management (IPM). **2**

ii. Describe the tools / components of Integrated Pest Management (IPM). **6**

OR iii. Write the importance of chemical control and effect of chemicals on human being. **6**

Q.5 i. What is the limitation of insecticide Act? **2**

ii. Write the 4 name of contact insecticides. **2**

iii. Describe about the application techniques of spray fluids. **4**

OR iv. Write about the chemical methods of insect control with suitable example of insecticide. **4**

Q.6 Attempt any two:

i. Enlist the 8 order name with their suitable example. **4**

ii. Write the main characteristics of order orthoptera. **4**

iii. Write the importance of binomial nomenclature in agriculture entomology. **4**

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Marking Scheme
AG3CO13 Fundamentals of Entomology

Q.1	i.	The largest class of the phylum arthropoda. (c) Insecta		**1**
	ii.	Generally, insects have ___ pair of legs (a) 3		**1**
	iii.	Scientific study of insects with surrounding environment is known as (b) Insect Ecology		**1**
	iv.	Insects survive by eating other living animals through hunting, sucking blood or as internal parasite are called. (b) Carnivores		**1**
	v.	The concept of Integrated pest management (IPM) was first given by (c) Geierr and Clark		**1**
	vi.	In this method we used insecticides, attractants, repellents, growth inhibitors. (a) Chemical methods		**1**
	vii.	Insecticide Act was come in this year. (a) 1968		**1**
	viii.	Which insecticide is systemic insecticide. (d) All of these		**1**
	ix.	Scientific name of any insect pest consists. (b) Genus & species		**1**
	x.	Mostly moths and butterfly belongs to the order. (d) Lepidoptera		**1**
Q.2	i.	Entomology Arthropoda	0.5 mark 0.5 mark	**1**
	ii.	Four characters of class insect 0.5 mark for each	(0.5 mark * 4)	**2**
	iii.	Modification/types of insect antennae with example. 0.5 mark for each		**5**
OR	iv.	Modification of insect's mouthparts Examples	2.5 marks 2.5 marks	**5**
Q.3	i.	Name of abiotic factors of environment. 0.5 mark for each	(0.5 mark * 2)	**1**
	ii.	Insect ecology and relation with agriculture entomology	2 marks	**3**
		Example	1 mark	
	iii.	Effect of temperature, moisture, rainfall and light on insects.	3 marks	**4**
		Example	1 mark	
OR	iv.	Importance of insect ecology branch in agriculture entomology 0.5 mark for each	(0.5 mark * 8)	**4**
Q.4	i.	Definition of Integrated Pest Management (IPM).		**2**
	ii.	Tools / components of Integrated Pest Management (IPM). 1 mark for each with example	(1 mark * 6)	**6**
OR	iii.	Importance of chemical control Effect of chemicals on human being.	3 marks 3 marks	**6**
Q.5	i.	Limitation of insecticide Act 0.5 mark for each	(0.5 mark * 4)	**2**
	ii.	Any 4 name of contact insecticides. 0.5 mark for each	(0.5 mark * 4)	**2**
	iii.	Application techniques of spray fluids. Example	2 marks 2 marks	**4**
OR	iv.	Chemical methods of insect control Example of insecticide.	2 marks 2 marks	**4**
Q.6		Attempt any two:		
	i.	Eight order name Their example.	2 marks 2 marks	**4**
	ii.	Characteristics of order orthoptera. 0.5 mark for each	(0.5 mark * 8)	**4**
	iii.	Importance of binomial nomenclature in agriculture entomology Binomial nomenclature Importance	 2 marks 2 marks	**4**

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