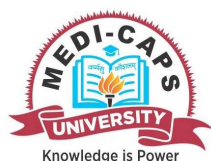


Enrollment No.....



Faculty of Agriculture

End Sem (Even) Examination May-2022

AG3CO47 Management of Beneficial Insects

Programme: B.Sc. (Hons.) 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. Which of the following is rock bee? **1**
 (a) Apis dorsata (b) Apis melifera
 (c) Apis florea (d) None of these
- ii. Antenna divided into how many parts? **1**
 (a) Three (b) Four (c) Two (d) Five
- iii. Caterpillar is the larval stage of _____. **1**
 (a) Silkworm (b) Lac Insects
 (c) Ants (d) Honeybee
- iv. 'Bombyx mori' is the scientific name of _____. **1**
 (a) Honeybee (b) Lac Insects
 (c) Silkworm (d) Butterfly
- v. Pebrine disease caused by _____. **1**
 (a) Protozoa (b) Bacteria (c) Fungi (d) Virus
- vi. American foul brood disease effective against: **1**
 (a) Honeybee (b) Lac Insects
 (c) Silkworm (d) Butterfly
- vii. Which of the following is an Insecticide? **1**
 (a) Monocrotophos (b) Mancozeb
 (c) Maneb (d) BM
- viii. 'Laccifer lacca' is belong to: **1**
 (a) Honeybee (b) Lac Insects
 (c) Silkworm (d) Butterfly
- ix. 'Zygogramma bicolorata' effective against which weed? **1**
 (a) Congress grass (b) Lantana camera
 (c) Opuntia sp (d) None of these

P.T.O.

- x. Beetle and Weevil belong to which order? **1**
 (a) Odonata (b) Isoptera (c) Diptera (d) Coleoptera
- Q.2 i. Define Metamorphosis. **1**
 ii. Give the scientific classification of Honeybee. **2**
 iii. Explain different species of honeybee and their characters. **5**
 OR iv. Explain communication and dance of honeybee. **5**
- Q.3 i. Define stifling. **1**
 ii. Write short notes on morphology and biology of silkworm. **3**
 iii. Explain the types of silkworms. **4**
 OR iv. Give the classification of mulberry silkworm is based on voltinism and geographical condition. **4**
- Q.4 i. Define Rearing, mounting and harvesting of cocoons. **2**
 ii. Explain the Natural Enemy of Silkworm. **6**
 OR iii. Explain the major natural enemy of Honeybee. **6**
- Q.5 i. Give and explain any three lac and its form. **2**
 ii. Why Lac cultivation is necessary. **2**
 iii. Explain lac strain. **4**
 OR iv. Write down the major natural enemy of lac insect in brief. **4**
- Q.6 Attempt any two:
 i. Write down the three methods of biological control. **4**
 ii. Describe the weed killing agent. **4**
 iii. What is parasitism? Classify? **4**

Marking Scheme
AG3CO47 Management of Beneficial Insects

Q.1	i.	Which of the following is rock bee?		1
		(a) Apis dorsata		
	ii.	Antenna divided into how many parts?		1
		(a) Three		
	iii.	Caterpillar is the larval stage of_____.		1
		(a) Silkworm		
	iv.	‘Bombyx mori’ is the scientific name of_____.		1
		(c) Silkworm		
	v.	Pebrine disease caused by_____.		1
		(a) Protozoa		
	vi.	American foul brood disease effective against:		1
		(a) Honeybee		
	vii.	Which of the following is an Insecticide?		1
		(a) Monocrotophos		
	viii.	‘Laccifer lacca’ is belong to:		1
		(b) Lac Insects		
	ix.	‘Zygogramma bicolorata’ effective against which weed?		1
		(a) Congress grass		
	x.	Beetle and Weevil belong to which order?		1
		(d) Coleoptera		
Q.2	i.	Define Metamorphosis.	1 Mark	1
	ii.	Classification of Honeybee.	2 Marks	2
	iii.	Species of honeybee	3 Marks	5
		characters of Honeybee	2 Marks	
OR	iv.	Communication	2 Marks	5
		Dance of honeybee.	3 Marks	
Q.3	i.	Define stifling.	1 Marks	1
	ii.	Morphology of silkworm.	3 Marks	3
	iii.	Types of silkworms.	4 Marks	4
OR	iv.	Classification of silkworm is based on voltinism	2 Marks	4
		Geographical condition.	2 Marks	
Q.4	i.	Rearing, mounting and harvesting	2 Marks	2

	ii.	Natural Enemy of Silkworm.	6 Marks	6
OR	iii.	Natural enemy of Honeybee.	6 Marks	6
Q.5	i.	Lac form.	2 Marks	2
	ii.	Lac cultivation	2 Marks	2
	iii.	Lac strain.	4 Marks	4
OR	iv.	Natural enemy of lac insect	4 Marks	4
Q.6		Attempt any two:		
	i.	Biological methods	4 Marks	4
	ii.	Weed killing agent.	4 Marks	4
	iii.	Define parasitism	1 Mark	4
		Classification	3 Marks	
