Total No. of Questions: 6

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Enrollment No	
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Faculty of Agriculture

End Sem (Even) Examination May-2022 AG3CO13 Fundamentals of Entomology

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.	In which type of head mouth parts have backward in position?			1	
		(a) Hypognathus		(b) Ophisthog	nathus	
		(c) Prognathus		(d) None of these		
	ii.	Antenna divided into how many parts?		1		
		(a) Three (b) I	Four	(c) Two	(d) Five	
	iii.	The basic component in the nervous system:			1	
		(a) Neuron (b)	Ganglion	(c) Dendron	(d) Six	
	iv.	Body lymph of Insects known as			1	
		(a) Hemocoel		(b) Hemolym	oh	
		(c) Appendages		(d) Casting		
	v.	Ecosystem term was coined by		1		
		(a) Smith (b)	Tansley	(c) Muller	(d) Ronald	
	vi.	Which of the following is biotic factor?			1	
		(a) Predator (b) 1	Rainfall	(c) Moisture	(d) Humidity	
	vii.	Which of the following is an Insecticide?			1	
		(a) Monocrotophos	8	(b) Mancozeb		
		(c) Maneb		(d) BM		
	viii.	Which of the following is cultural Method of IPM?			1	
		(a) Winnowing		(b) Pheromon	e Trap	
		(c) Ploughing		(d) None of th	iese	
	ix.	Who is called father of taxonomy?			1	
		(a) Carl Linnaeus		(b) HS Smith		
		(c) Aristotle		(d) Paul Mulle	er	
						P.T.O.

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	х.	Moth and butterfly belong to which order?				
		(a) Odanata (b) Isoptera (c) Diptera (d) Lepidoptera				
Q.2	i.	Define Entomology.	1			
	ii.	Write short notes on cuticle.	2			
	iii.	Give the modification of insect antenna with diagram.	5			
OR	iv.	Give the modification of insect legs with diagram.				
Q.3	i.	Define metamorphosis.	1			
	ii.	Write short notes on digestive system of insects.				
	iii.	Explain circulatory system in insects.	4			
OR	iv.	Describe the excretory system in insects.	4			
Q.4	i.	Define ecology and ecosystem.	2			
	ii.	Write down the abiotic factors and their effects on pest occurrence.	6			
OR	iii.	Write down the biotic factors and their effects on pest occurrence.	6			
Q.5	i.	Classify categories of pests.	2			
	ii.	Write short notes on recent methods of pest control.	2			
	iii.	Describe the different methods of IPM.	4			
OR	iv.	Give the classification of insecticides.	4			
Q.6		Attempt any two:				
	i.	Define systematics, taxonomy and classification.	4			
	ii.	Write down the four insects order with their characters.	4			
	iii.	Write down any four insects with their systemic classification.	4			

Marking Scheme

AG3CO13 Fundamentals of Entomology

Q.1	i.	In which type of head mouth parts have backward in position? (b) Ophisthognathus				
	ii.	Antenna divided into how many parts?				
		(a) Three				
	iii.	The basic component in the nervous system:		1		
		(a) Neuron				
	iv.	Body lymph of Insects known as				
		(b) Hemolymph				
	v.	Ecosystem term was coined by				
		(b) Tansley				
	vi.	Which of the following is biotic factor?		1		
	(a) Predator					
	vii.	Which of the following is an Insecticide?		1		
		(a) Monocrotophos				
	viii.	Which of the following is cultural Method of IPM?	•	1		
		(c) Ploughing				
	ix.	Who is called father of taxonomy?		1		
		(a) Carl Linnaeus				
	х.	Moth and butterfly belong to which order?		1		
		(d) Lepidoptera				
Q.2	i.	Definition of Entomology.		1		
	ii.	Short notes on cuticle.		2		
	iii.	Modification of insect antenna	2 marks	5		
		Diagram	2 marks			
OR	iv.	Modification of insect legs	2 marks	5		
		Diagram	2 marks			
Q.3	i.	Definition of metamorphosis.		1		
	ii.	Short notes on digestive system of insects.		3		
	iii.	Circulatory system in insects		4		
		As per the explanation				
OR	iv.	Excretory system in insects		4		
		As per the explanation				

Q.4	i. Definition of ecology and ecosystem.			
	ii.	Abiotic factors	3 marks	6
		Their effects on pest occurrence	3 marks	
OR	iii.	Biotic factors	3 marks	6
		Their effects on pest occurrence	3 marks	
Q.5	i.	Categories of pests.		2
	ii.	Short notes on recent methods of pest control.		2
	iii.	Different methods of IPM		4
		As per the explanation		
OR	iv.	Classification of insecticides		4
		As per the explanation		
Q.6		Attempt any two:		
	i.	Define systematics	2 marks	4
		Taxonomy and classification	2 marks	
	ii.	Four insects order	2 marks	4
		With their characters	2 marks	
	iii.	Any four insects	2 marks	4
		With their systemic classification	2 marks	
