



GIET UNIVERSITY, GUNUPUR – 765022

B. Sc. (AG) (Second Semester) Examinations, October – 2021

ENT-121 - Fundamentals of Entomology

Time: 2 hrs

Maximum : 50 Marks

The figures in the right hand margin indicate marks.

PART – A

Q.1. Fill in the blanks with suitable word / figure.

0.5 x 10 = 5 Marks)

- a. In cockroaches ocelli is reduced and represented by
- b. Thrips belongs to family.....
- c. Type of pupae present in Butterfly.....
- d. The first longitudinal wing vein is.....
- e. Fossorial legs are found in.....
- f. Cells which nurse the egg cells.....
- g. In ovarioles eggs are alternate with nutritive cells.
- h. The contract condition of the heart is called.....
- i. The main excretory product of insect is.....
- j. Sawfly having.....type of antennae.

Q.2. Define (or) Explain the following in one or two sentences.

(1 x 5 = 5 Marks)

- a. Oligophagous pest
- b. Antixenosis
- c. Predator
- d. Pheromone
- e. Physical poison

Q3. Match COLUMN-A with COLUMN-B

(0.5 x 10 = 5 Marks)

Column – A		Column – B	
(a)	Fruit Flies	(i)	Breast bone
(b)	Cecidomyiidae	(ii)	Intermediate metamorphosis
(c)	Horny ovipositor	(iii)	Saw like ovipositor
(d)	Empodium	(iv)	Fruit flies
(e)	Thrips	(v)	Thrips
(f)	Terebrantia	(vi)	Diptera
(g)	Asymmetrical mouth parts	(vii)	Silk moth
(h)	Bipectinate	(viii)	Butterfly
(i)	Siphoning	(ix)	5 segmented Tarsi
(j)	Coccinellidae	(x)	Tephritidae

Q4. Write True or False against each statement

(0.5 x 10 = 5 Marks)

- a. Example of hamulate type wing coupling is **Butterfly**.
- b. The differentiation of insect body into functional regions is called **tagmosis**.
- c. Scansorial leg modification found in **termite**.
- d. C shaped larva is found in **Diptera**.
- e. Tumbler pupa is found in **Mosquito**.
- f. **Cocoon** is the protective enclosure of the pupa of dipterans.
- g. Father of entomology **William Kirby**
- h. **Book lungs** are the respiratory organs in Arachnida.
- i. **Occipital** is the true suture.
- j. Honeybees belong to order **Hymenoptera**.

PART – B

Attempt ANY FIVE questions. All question carries equal marks.

(5 x 6 = 30 Marks)

5. Narrate some non-chemical methods of pest control with emphasis on mechanical and physical control measures.
6. Briefly explain the basic structure of insect leg. Enlist different types of leg modifications along with example.
7. Explain the different types of Larvae with suitable example.
8. Define different types of diapause and differentiate between complete and incomplete metamorphosis.
9. What are the botanical insecticides that can be employed in pest management? Narrate.
10. Explain Circulatory system of insect.

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