

2021-24

Full Marks : 60

Time : 3 Hours

Candidates are required to give their answer in their own words as far as practicable. Their figures in the margin indicate full marks.

Answer from **both** the **Sections** as directed.

Section - A

(Compulsory)

1. Choose the **correct** answer of the following :
1×10=10

(a) What is the middle part of an insect body present between the head and the abdomen called ?

- (i) Thorax
- (ii) Head
- (iii) Abdomen
- (iv) None of the above.

(b) *Odontotermes obesus* is the scientific name of which of the following insects ?

- (i) Termite
- (ii) Cutworm
- (iii) Red ant
- (iv) Shoot borer

(c) Which of the following is true about the immature scale insects ?

- (i) Sliders
- (ii) Crawlers
- (iii) Gliders
- (iv) None of the above

(d) Aphid, small sap - sucking insects are examples of :

- (i) Oviparous
- (ii) Viviparous
- (iii) Paedogenesis
- (iv) Parthenogenesis

(e) Which of the following is the smallest order of class Insecta ?

- (i) Hemiptera
- (ii) Odonata
- (iii) Zeroptera
- (iv) Coleoptera

(f) Chewing and biting type of mouth parts are found in :

- (i) Grass hopper ,
- (ii) Beetle
- (iii) Honey bee
- (iv) Obligate

(g) Which of the following statement is true for Entomophagy ?

- (i) Refers to eating birds
- (ii) Refers to eating insects
- (iii) Refers to eating fishes
- (iv) None of the above

(h) Which of the following insecticides is capable of controlling mites ?

- (i) Toxaphene
- (ii) Cypermethrin
- (iii) Endosulfan
- (iv) Monocrotophos

(i) Which of the following is a Hemimetabolous insects ?

- (i) Cockroach
- (ii) Silverfish
- (iii) Butterfly
- (iv) Fly

(j) The modified hind wings in flies (used for balance) are called :

- (i) Elytra
- (ii) Halteres .
- (iii) Hamuli
- (iv) Tegmina

2. Describe the types of Antennae in insects. 5

OR

Write about the Sensory receptors in insects.

Section - B

Answer any **three** questions of the following :
15×3=45

3. Write in detail about the social insects and their social life.
4. Briefly discuss "Insects as mechanical and biological vectors ?
5. Describe the respiratory system of insects with diagram.
6. Write in detail about "Insects as plant pests".
7. Write the classification of insects upto orders.
