



BRAINWARE UNIVERSITY

Term End Examination 2023-2024

Programme – B.Sc.(Ag)-Hons-2022/B.Sc.(Ag)-Hons-2023

Course Name – Fundamentals of Entomology

Course Code - CC-BAG272(T)

(Semester II)

Full Marks : 50

Time : 2:0 Hours

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group-A

(Multiple Choice Type Question)

1 x 20=20

1. Choose the correct alternative from the following :

(i) Tenth edition of Systema Naturae was published in which year?

- a) 1735
- b) 1785
- c) 1758
- d) 1753

(ii) What type of defense mechanism is seen in leaf insects?

- a) Behavioural
- b) Chemical
- c) Colourational
- d) Protective covering

(iii) Select the extinct group among the following -

- a) Diplopoda
- b) Onychophora
- c) Trilobita
- d) Chilopoda

(iv) In which layer of insect integument Chitin is absent?

- a) Endocuticle
- b) Exocuticle
- c) Epicuticle
- d) Procuticle

(v) Cervix is attached with insect head through which of the following part?

- a) Occiput
- b) Occipital foramen
- c) Post-occiput
- d) Tentorium

(vi) What type of leg is seen in head louse?

- a) Natatorial
- b) Sticking
- c) Raptorial
- d) Scansorial

(vii) In which insect order Pterostigma can be found?

- a) Dictyoptera
- b) Neuroptera
- c) Odonata
- d) Ephemeroptera

(viii) Name the process in which enzyme secretion occurs without cell break down -

- a) Holocrine
c) Pseudocrine
- (ix) Identify the type of parthenogenesis by which only males are produced -
a) Thelytoky
c) Arrhenotoky
- (x) Terebrantia and Tubulifera are the sub-orders of which insect order?
a) Neuroptera
c) Thysanoptera
- (xi) Identify the part of mouth that is absent in thrips -
a) Right Maxilla
c) Left Maxilla
- (xii) Spumaline is related to -
a) Mantids
c) Grasshoppers
- (xiii) Citronella oil acts as a repellent for which insect?
a) Honey bees
c) Mosquitoes
- (xiv) When a pest occurs mostly during a particular part of the year and usually the incidence is governed by climatic conditions, then the pest is called as -
a) Endemic pest
c) Seasonal pest
- (xv) Juvenile hormone analogues belong to which generation of pesticides?
a) First
c) Fourth
- (xvi) Who discovered the insecticidal property of DDT?
a) Othmar Zeidler
c) Paul Muller
- (xvii) What type of sprayer is used to spray tall trees?
a) Knapsack sprayer
c) Foot sprayer
- (xviii) Facultative diapause is found in which of the following insects?
a) Silkworm
c) Pink boll worm
- (xix) Formation of alley ways in rice field to control BPH is identified as -
a) Mechanical Control
c) Physical Control
- (xx) Which insect among the following has amplexiform wing coupling mechanism?
a) Honeybee
c) Hepialid moth
- b) Hemicrine
d) Merocrine
- b) Amphitoky
d) Deuterotoky
- b) Dictyoptera
d) Isoptera
- b) Right Mandible
d) Left Mandible
- b) Cockroaches
d) Mosquitoes
- b) Moths
d) Fleas
- b) Persistent pest
d) Epidemic pest
- b) Third
d) Second
- b) Paul deBach
d) Michael Faraday
- b) Rocker sprayer
d) Hand sprayer
- b) Gram pod borer
d) Green lacewing
- b) Cultural Control
d) Host-Plant Resistance
- b) Fruit sucking moth
d) Butterfly

Group-B

(Short Answer Type Questions)

2.5 x
10=25

2. Illustrate the characteristics of class Insecta. (2.5)
3. Define Species, Sub-species and Biotype. (2.5)
4. Explain in brief about viviparity in insects and its sub-types. (2.5)

5. Identify the qualities of a successful parasitoid in Biological control. (2.5)
6. Identify properties of an ideal insecticide. (2.5)
7. Identify the limitations of chemical control. (2.5)
8. Identify the importance of ecology in IPM. (2.5)
9. Illustrate the characters of the order Lepidoptera. (2.5)
10. Explain the structure of an insect antenna. (2.5)
11. Discuss in brief about Eruciform larva. (2.5)

OR

Discuss about the functions of Haemolymph. (2.5)

Group-C

(Long Answer Type Questions)

5 x 1=5

12. Elaborately discuss metamorphosis and diapause in insects. (5)

OR

Briefly elaborate the female reproductive system in insects. (5)
