Total No. of Questions: 6 *Total No. of Printed Pages:2*

Enrollment No.....

Faculty of Science

End Sem (Odd) Examination Dec-2022

FS3EG03 Entomology

Programme: B.Sc.(Hons.) Branch/Specialisation: Forensic Science

Duration: 3 Hrs. **Maximum Marks: 60**

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. Insects are classified into the phylum_____. **1**
(a) Nematoda (b) Mollusca
(c) Arthropoda (d) Platyhelminthes

ii. Most primitive arthropods belong to the class- **1**
(a) Archnida (b) Merostomata
(c) Onychophora (d) Myriapoda

iii. The main characteristics feature of an insect is- **1**
(a) Three pair of legs (b) Presence of wings
(c) Pair of antennae (d) All of these

iv. Structure G is the- **1**
(a) Tympanum (b) Trochanter
(c) Ovipositor (d) Spiracle

v. Another word for the metamorphosis is- **1**
(a) Evolution (b) Change
(c) Modelling (d) Survival

vi. In the complete metamorphosis, which of the following is larval stage in insects? **1**
(a) Caterpillar (b) Maggots
(c) Grubs (d) All of these

vii. Small, shiny black flies often found on excrement and decaying materials- **1**
(a) Silphidae (b) Cleridae (c) Sepsidae (d) Muscidae

viii. Flies that may arrive and begin laying eggs within minutes of death- **1**
(a) Blow flies (b) Silphidae (c) Piophilidae (d) Cleridae

P.T.O.

ix. _____ is determined largely by estimating the age of developing immature insects collected at the time of discovery and using estimates of accumulated degree hours from temperature data. **1**
(a) Minimal PMI (b) Muscidae
(c) Piophilidae (d) Maximal PMI

x. Estimations of the postmortem interval (PMI) using entomological evidence must take into account _____. **1**
(a) The species of insect present
(b) Weather conditions
(c) Geographical locations of the decedent's body
(d) All of these

Q.2 i. Define Entomology. Name the insects involved in the decomposition of dead body. **2**
ii. Explain the dominance of insects in animal kingdom. **3**
iii. Write a note on the history of entomology in India. **5**
OR iv. Explain the classification of phylum Arthropoda. **5**

Q.3 i. Draw the structure of male and female genital organ. **2**
ii. Explain the morphology of insects with the help of diagram. **8**
OR iii. Explain the structure and modification of insects antennae and legs. **8**

Q.4 i. What is metamorphosis? Explain with example. **3**
ii. Explain the types of reproduction in insects. **7**
OR iii. Explain the structure and function of circulatory system of insects. **7**

Q.5 i. Explain the biology of houseflies. **4**
ii. Explain the biology of blow-flies and flesh flies. **6**
OR iii. Explain how insects helps in the decomposition of dead body? **6**

Q.6 Attempt any two:
i. Give the significance of entomological evidence. **5**
ii. Give any one case study of entomological evidence explaining the duration of post-mortem interval (PMI) **5**
iii. How can we use entomological evidence in finding cause of death? **5**

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Scheme of Marking

MEDI-CAPS UNIVERSITY Knowledge is Power	Faculty of Science End Sem (Odd) Examination Dec-2022 Entomology (FS3EG03)
	Programme: B.Sc. | | Branch/Specialisation:

Note: The Paper Setter should provide the answer wise splitting of the marks in the scheme below.

Q.1	i)	c. Arthropoda	1
	ii)	b. Merostomata	1
	iii)	d. All of these	1
	iv)	b. Trochanter	1
	v)	d. Change	1
	vi)	d. All of them	1
	vii)	c. Sepsidae	1
	viii)	a. Blow flies	1
	ix)	a. Minimal PMI	1
	x)	d. All of these	1
Q.2	i.	Defn – (1m) & insects Name – (1m)	2
	ii.	Defn insects (1m), Dominance (2m)	3
	iii.	History of Entomology in India (5m)	5
OR	iv.	Classification & Example (4m) Defn Arthropoda (1m)	5
Q.3	i.	male (1m), female (1m), Structure.	2
	ii.	Insects Defn (1m), Morphology (6m) Example (1m)	8
OR	iii.	Structure & Explanation Antennae (4m), Legs (4m)	8
Q.4	i.	metamorphosis Defn (1m) Explain & Eg. (2m)	3
	ii.	Reproduction System (7m)	7
OR	iii.	Circulatory System (7m)	7
Q.5	i.	Defn (1m), Example (1m) & Biology (2m)	4
	ii.	Biology – Blowflies (3m), flesh fly (3m).	6
OR	iii.	Insects life cycle (3m), decomposition stages (3m)	6
Q.6			
	i.	Significance (5m)	5
	ii.	Case study (3m), PMI (2m)	5
OR	iii.	Entomological Evidence (2m), Finding cause (2m) & Correlation (1m)	5

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