

LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034



B.Sc. DEGREE EXAMINATION – ADVANCED ZOOLOGY AND BIOTECHNOLOGY

FIRST SEMESTER – NOVEMBER 2022

UAZ 1505 – INVERTEBRATA - II

Date: 03-12-2022

Dept. No.

Max. : 100 Marks

Time: 01:00 PM - 04:00 PM

SECTION A

Answer ALL the Questions

1.	Definitions		(5 x 1 = 5)
a)	Malacostraca	K1	CO1
b)	Epitaenia	K1	CO1
c)	Aristotle's lantern.	K1	CO1
d)	Lymphatic filariasis.	K1	CO1
e)	Pest	K1	CO1
2.	Fill in the blanks		(5 x 1 = 5)
a)	Petasma is a membranous modified endopodite present in _____ appendage	K1	CO1
b)	The mantle of <i>Pila</i> also referred as _____	K1	CO1
c)	An example for class Ophiuroidea is _____	K1	CO1
d)	Mouth parts of bed bug is _____	K1	CO1
e)	The function of Malpighian tubule is _____	K1	CO1
3.	Match the following		(5 x 1 = 5)
a)	Book Lungs - <i>Asterias</i>	K2	CO1
b)	Pulmonary sac - <i>Periplaneta</i>	K2	CO1
c)	Tracheae - <i>Penaeus</i>	K2	CO1
d)	Branchiostigite - Arachnida	K2	CO1
e)	Dermal Papillae - <i>Pila</i>	K2	CO1
4.	True or False		(5 x 1 = 5)
a)	Nauplius stage represents the ancestral form of crustaceans	K2	CO1
b)	Bipectinate gills present in <i>Pila</i> for respiration.	K2	CO1
c)	Pedicellaria are seen in <i>Asterias</i>	K2	CO1
d)	Organ of Bojanus is the reproductive system of cockroach.	K2	CO1
e)	Silverfish have a preference for starchy materials such as paper and wood as their primary food source.	K2	CO1

SECTION B

Answer any TWO of the following in 100 words (2 x 10 = 20)

5.	Explain the excretory system of <i>Penaeus</i> .	K3	CO2
6.	Describe the digestive system of <i>Pila</i> .	K3	CO2
7.	Explain the organisation of <i>Asterias</i> with a diagram.	K3	CO2
8.	Describe the life cycle, damages and control measures of <i>Sitophilus oryzae</i>	K3	CO2

SECTION C

Answer any TWO of the following in 100 words (2 x 10 = 20)

9.	Classify the Phylum Mollusca with examples.	K4	CO3
10.	Evaluate the role of pedicellaria based on its structure and types.	K4	CO3
11.	Illustrate and explain the mouth parts of cockroach with a diagram.	K4	CO3
12.	Enumerate the different methods to control cotton pest.	K4	CO3

SECTION D

Answer any ONE of the following in 250 words (1 x 20 = 20)

13.	The development of <i>Penaeus</i> is indirect – Justify	K5	CO4
14.	Compile the components of water vascular system for the coordination of various functions in asterias.	K5	CO4

SECTION E

Answer any ONE of the following in 250 words (1 x 20 = 20)

15.	Prepare a flowchart and explain the central and autonomous nervous system of cockroach.	K6	CO5
16.	Summerise and compile the importance of IPM principles for pest control.	K6	CO5

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