- 17- Siphuncle is important in (Nautilus Laganum Cypris).
- 18- (Cypris Chiton Anodonta) possesses crystalline style.
- 19- Detorsion occurs in (Pagurus Artemia no one).
- 20- (Squilla Holothuria Ophiocoma) moves efficiently and quickly.
- 21- Holothuria has (exoskeleton endoskeleton mantle).
- 22- (Nauplius Trochophore Cyprid) larva possesses a simple eye & 3 pairs of appendages.
- 23- Antennae are absent from (Chelicerata Crustacea Myriapoda).
- 24- (Ommatidia Pearls Tagmata) are optic units in Malacostraca.
- 25- Basic mollusk's body is composed of (three five seven) regions.
- 26- Mysis larva is found in (Ophiocoma Anodonta Penaeus).

O2. Answer six only of the following: (24 marks)

- 1- Compare only by drawing & labeling the nervous system in both Anodonta & Scolopendra.
- 2- Demonstrate structure & functions of water vascular system in Echinodermata.
- 3- Differentiate between Diplopoda & Chilopoda with examples.
- 4- Classify Class Gastropoda giving an example for each.
- 5- Only draw with labeling the blood circulation in both Buthus & Sepia.
- 6- Distinguish between normal & brittle stars, giving examples (scientific name).
- 7- List the main characteristics of Echinodermata.
- 8- Illustrate structure & function of mantle in Mollusca.

----- End ----بالتوفيق و السداد ... هناء عاطف جودة





University: Asyut
Faculty: Science
Department: Zoology

Invertebrate II Code: 222 Z August 2025 Total degree 50 Final exam. Time: 2 hrs.

Answer the following questions: Note: The questions are in 2 pages

Q1. Choose between brackets:

(26 marks)

- 1- Jet propulsion is known in (Octopus Holothuria Tripneustes).
- 2- (Mites Slugs Pauropods) have capitulum.
- 3- (Book gill Green gland Kidney) is the excretory system in Limulus.
- 4- Dentalium has (exoskeleton endoskeleton mantle).
- 5- (Torsion Coiling Detorsion) occurs during early developmental stages.
- 6-Parthenogenesis could be noticed in (Pagurus Artemia no one).
- 7- (Radula Endoskeleton Capitulum) is characteristic of Chiton.
- 8- Conus Belongs to (Prosobranchia Opisthobranchia Pulmonata).
- 9- Nauplius larva is found in (Ophiocoma Anodonta Neptunus).
- 10- (Pagurus Sepia & Strongulus Limulus) can secrete/s its/their shell/s.
- 11- Peripatus belongs to (Arthropoda Mollusca no one).
- 12- Spinnerets are found in (Buthus Lycosa Dentalium).
- 13- (Cypris Chiton Echinometra) possesses exoskeleton.
- 14- (Scallops Clams Oysters) are Soft Bottom Burrowers.
- 15- Limulus belongs to (Chelicerata Crustacea Chilopoda).
- 16- (Tagmatization Torsion Cryobiosis) occurs in tardigrades.

Follow the rest of questions



Assiut University Faculty of Science

Zoology and Entomology Department

Course: General Entomology

Course code: (240Z)

Time: Two hours



Final exam (Summer 2025)

nswer the following questions					
	I: Choose the best correct answer (15 marks)				
	1. The stage during the life cycle of an insect between the larva and the adult				
'8) Egg	b) Adult		c) Pupa	
	2. All insects are carrying two pairs of wings.				
	a) True		b) False		
	3. A process where insects undergo structural and morphological changes				
8) Oviposition	b) Matin	g	c) Metamorphosis	
	4. Antennae are carried on of insects				
	a)Head	b)Thora	X	c)Abdomen	
	5. The process of shedding an exoskeleton in order to grow				
8) Decomposition	b) Molting	c) Mating	d) Oviposition	
	6.The type of change some insects go through which involves four stages				
	a) Incomplete metamorphosis b) Complete metamorphosis				
	7. Egg, nymph, and adult are all stages in				
	a) Incomplete metamorphosis b) Molting c) Complete metamorphosis				
	8. Bad insects represent of all insects				
	a) 99%	b)1%	c)100%		
	9. In insects the circulatory system is				
	a) Opened	b) Closed	c) Both	are false	
10. The first stage in the life cycle of the butterfly is					
8	n) Nymph	b) egg	c) larva	
11. Oxygen entrance in terrestrial insects usually go through					
8	n) Trachea	b) Dorsal	vessel	c) Spiracles	