



Final term Exam
May 2023



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| Department: Zoology | Major: ثلاثة حيوان وكيمياء معتمد | Course Title: لافقاريات متقدم وطفيليات |
| Code number: 317 Z | Mark: 90 | Date: 28 / 5 / 2023 |
| Time: 2 Hours | | الإمتحان في ٢ ساعات |

Part 1: Advanced Invertebrates-(45 Marks)

Question One: (25 Marks)

A) Complete (20 Marks) (1 degree for each item):

- 1- True segmentation found in and
- 2- Asexual reproduction in porifera occurs by and
- 3- The polyp of stony corals secret to protect its soft bodies, and reproduce by
- 4- Types of corals are, and
- 5- Lophophores found in aquatic organism can easily be described as a ring of surrounding the mouth, or as structure or as structure?
- 6- The body wall of spoon worm is, and surrounded by a large
- 7- Shrimps feed by, and feed on or
- 8- In *Yoldia*, the mantle lobe has and edge?
- 9- The sipuncula mouth located at the end of the introvert?

B) Define the following scientific name: (5 Marks) (2.5 degree for each item):

- 1- Ostia
- 2- Brachiopods

Question Two: (20 Marks)

Choose the correct answer: (2 degree for each item):

| | | | |
|---|--|-----------------------|-------------------|
| 1 | The excretory organs in annelids and mollusks are..... | | |
| | a- true nephridia | b- Malpighian tubules | c- amoeboid cells |
| 2 | Sponge is | | |
| | a- triploblastic | b- diploblastic | c- only one layer |
| 3 | What is the scientific name of Bryozoa? | | |
| | a- Polyzoa | b- Ectoprocta | c- Protostomes |

| | | | | |
|----|---|------------------------------|-----------------------------|--|
| 4 | What is the main method of respiration in Bryozoa? | a- Breathing | b- Respiration | c- Diffusion |
| 5 | Sipuncula belongs to Phylum? | a- Annelida | b- Porifera | c- Chidaria |
| 6 | The second appendage of shrimp head is? | a- Mandibles | b- Antenna | c- Maxillules |
| 7 | Two shelled like clams and mussels are animals? | a- gastropod | b- bivalve | c- scaphopod |
| 8 | Presently there are invertebrate phyla? | a- 30 | b- 40 | c- 50 |
| 9 | Which of the following is a characteristic of lower invertebrates' body organization? | a- Complex body organization | b- Simple body organization | c- Multicellular body organization |
| 10 | What is the function of the lophophore in autozooids? | a- Reproduction | b- Protection | c- Capturing food particles from the water |

Part 2: Parasitology (45 Marks)

Question Three: (30Marks)

A) Complete (20 Marks) (1 degree for each item):

- 1- In both organisms are benefit from the relationship, while in one of organism is harmed.
- 2- Symbiosis is classified according to physical location to symbiosis and symbiosis?
- 3- The Four main groups of Protozoa that recognized on the basis of their locomotory organelles are and
- 4- Symptoms of *Entamoeba* disease include mild symptoms such as and while severe symptoms such as and
- 5- An infection by a helminth is known as
- 6- The schistosome life cycle takes place inside 2 hosts; and
- 7- The subclass has few parasitic members while, members of subclass are important as fish parasites?
- 8- Salmon lice feed on and of fish?

B) Mention the symptoms of the followings: (10 Marks) (5 degrees for each)

1) Nematodes

2) Salmon lice

Question Four: (15 Marks)

A) Choose the correct answer: (14 Marks) (2 degree for each item):

| | | | |
|---|--|------------------------------|-----------------------------------|
| 1 | Why do ruminants need protozoans and bacteria in their rumen? | | |
| | a- To produce methane | b- To produce carbon dioxide | c- To help them digest cellulose. |
| 2 | In general, the study of prokaryotes falls under the field of rather or parasitology or? | | |
| | a- Bacteriology | b- Parasitology | c- Zoology |
| 3 | What is the relationship between the algae, cyanobacteria and the fungi in lichen? | | |
| | a- Commensalism | b- Parasitism | c- Mutualism |
| 4 | The flame cells and tube cells are called? | | |
| | a- nephridia | b- protonephridia | c- tegument |
| 5 | Mehlis gland complex is made ofdifferent type of cells? | | |
| | a- 3 | b- 4 | c- 2 |
| 6 | Asexual reproduction in schistosome occurs in? | | |
| | a- mammals | b- soil | c- fresh water snails |
| 7 | Nematodes is responsible for the pathogenic effects? | | |
| | a- Adult worm | b- eggs | c- larvae |

B) What is the importance of parasitic crustaceans? (1 Mark)

"End Exam"

With Best Wishes

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