

امتحان نهائي + دراستهم

امتحان الرابع



Final term Exam



Department: Zoology **Major:** Zoo./Chem. **Course Title:** Principles of marine ecology
Code number: 422 Z **Mark:** 60 **Date:** 2 -1- 2025
Time: One Hour

Question One: (Write on:) (15 degree)

- 1- Factors limiting coral reef distribution
- 2- Estuaries
- 3- Ecological role of marine worms

Question Two: (Complete the following) (20 degree)

- 1- Example of commensal symbiotic relationship
- 2- Examples of meroplankton are
- 3- Marine organisms are classified according to the type of life to
- 4- The continental shelf zone is located between
- 5- Wave action is an important to organisms as
- 6- Decline in the Mediterranean fish stock is due to
- 7- The main different aquatic habitat in Egypt are
- 8- From the different tropical habitats:
- 9- The organisms that they can produce their own light in the deep ocean are
- 10- Organisms found in the deep oceans require adaptations to
- 11- There are three types of symbioses:
- 12- The deep oceans are broadly characterised by three major physical variables:
- 13- Nekton includes
- 14- The sessile filter feeders such as:
- 15- Continental shelves are typically high in nutrients, for several reasons.
- 16- The phenomenon where water molecules move from low concentration to high concentrated solutions known as
- 17- Bacteria derive energy from chemical sources in a process known:
- 18- Farming of aquatic organisms in fresh or salt water known as

19- Intertidal region have a fluctuations in

20- The oceans are very important because

Question Three: (Write the correct selection) (10 degree)

1-Marine protozoa with external shell:-

- a- Cephalopoda b- Foraminifera c- Oligochaeta d- Cyanophyta

2- Eat both plant and animal food:-

- a- Omnivores b- Herbivores c- Carnivores d- Detritivores

3- Water depth in it not exceed than 200 m:-

- a- Deep zone b- Continental shelves c- Sandy shore d- Rocky shore

4- Animals live in it will have the ability to tolerate stressful environment:-

- a- Open sea b- Intertidal region c- benthic region d- Continental shelf

5-It is cnidarian marine organism:-

- a- Hydra b- Sea anemone c- Tilapia d- Acantharia

6-It is an protozoan marine animal:-

- a- Favia b- Alconium c- Foraminifera d- Euglena

7-It is the main fouling organism:-

- a- Balanus b- Paramecium c- Aurelia d- Hydra

8- They are very important in hatcheries of the economic aquatic organisms:-

- a- Lepus b- Rotifera c- Euglena d- Sea horse

9- Hydrozoa catch their prey by:-

- a- Nematocyste b- Tentacles c- Jellyfish d- Spines

10- Belonging to Mollusca:-

- a- Amphipods b- Isopods c- Copepods d- Gastropods

Question Four: What is the meaning by each of the following:- (10 degree)
(one or two ward only for each)

1- They are marine trees with simple leaves and complex root systems.

2- Are composed of living organisms and their non-living environment.

3- Occurs where organisms develop close relationships to each other

4- A group of organisms of the same species that occupies a specific area.

5- Aquatic organisms that can actively swim.

6- The organisms with weak or without locomotor organs.

7- Are highly productive area.

8- Bacteria derive energy from chemical sources.

9- Are the most important nutrients for the growth of algae and aquatic plants.

10- Are the most abundant organisms in the oceans.

Question Five: (write True or False) (5 degree)

1- *Hydra* belonging to class Hydrozoa and live in fresh water.

2- Marine biodiversity is not affected by light.

3- The organisms in great depths can able to adaptation.

4- The decomposition of organic materials decrease dissolved oxygen in the water.

5- The algal blooms resulted from the eutrophication in the aquatic environment.

6- Holoplanktons are planktonic throughout their entire lives.

7- *Balanus* are one from the most important fouling organisms.

8- Much polluted water is dumped into the world's oceans.

9- Density increase in fresh water than marine water.

10- There is an interactions between plankton and nekton organisms.

With Best Wishes

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