



جامعة دمياط  
كلية العلوم



Damietta University  
Faculty of Science  
Environmental Sciences Department

Second Semester Exam  
Date: 23/6/2024  
Time allowed: 2 hours

**Wetlands and aquatic plants (313 E)**  
**Third level students of Environmental Sciences**

Answer all the following questions (90 marks)

**Question 1:**

(30 marks)

**Mention the scientific term for the following sentences**

- 1- Areas occur along the length of coast. They cover the ocean area extending out from the coastline to 6 meters below the lowest tide.
- 2- Areas partly enclosed by land but they open out to the sea and include mangrove swamps and saltmarshes.
- 3- Areas found around rivers, creeks, streams and include floodplains and marshes that are fed by these freshwater channels.
- 4- Inland freshwater lakes, man-made reservoirs and the areas around them.
- 5- Inland freshwater areas that generally have plenty of trees and other vegetation.
- 6- Plants that are not attached to the water's bottom, and their leaves are firm and remain flat to absorb more sunlight.
- 7- Plants rooted to the ground of the water but have most of their vegetation above water.
- 8- Plants rooted to the water's floor and most of their vegetation is under water. The leaves of these plants are thin and narrow
- 9- Areas which can be found along protected coastlines in middle and high latitudes worldwide.
- 10- Wetlands frequently or continually inundated with water, characterized by emergent soft-stemmed vegetation adapted to saturated soil conditions

**Question 1:**

(40 marks)

**Determine if the following statement Correct or false and correct the false one:**

- 1- Fertility largely determines how the soil develops and the types of plant and animal communities living in and on the soil
- 2- Wetlands are areas where water covers the soil all year
- 3- Wetlands support only all aquatic species.

- 4- An area doesn't need to be permanently wet to qualify as a wetland
- 5- Wetlands are found on every continent
- 6- Tidal Wetlands include marshes and wet meadows dominated by herbaceous plants
- 7- Marsh vegetation and microorganisms use less nutrients for growth
- 8- Tidal Wetlands are found along coasts.
- 9- Mangrove swamps, with salt-loving shrubs or trees, are common in tropical climates
- 10- The quantity of water present and the timing of its presence in part determine the functions of a wetland and its role in the environment.
- 11- Marshes nutrients are plentiful and the pH is usually neutral
- 12- Marshes recharge groundwater supplies and moderate streamflow by providing water to streams
- 13- Non-tidal marshes are mostly saline marshes
- 14- Non-tidal marshes are highly organic, mineral rich soils of clay, silt, and sand underlie these wetlands
- 15- Tidal marshes buffer stormy seas.
- 16- Swamps are characterized by standing water during certain times of the year
- 17- Swamps divided into three two major classes, depending on the type of vegetation present
- 18- Fens are one of the most distinctive kinds of wetlands
- 19- Bogs, are peat-forming wetlands that receive nutrients from sources other than precipitation
- 20- Aquatic plants are any species that naturally prosper in a wet environment

**Question 2:**

**(20 marks)**

**Complete** with the suitable answer:

- 1- ..... are areas of land covered or saturated with fresh, brackish or salt water that's generally still or slow moving.
- 2- The prolonged presence of water creates conditions that favor ..... and promote .....
- 3- Wetlands vary widely because of ....., ....., ....., ....., .....
- 4- Two general categories of wetlands are ..... and .....
- 5- ..... are the most prevalent and widely distributed wetlands in North America.

**Best wishes**

**Dr. Doaa Adel Elemam**