Damietta University

Faculty of Sciences
Environmental Sciences Dept.
Date: 11 /1 /2025

First Semester Jan - 2025
4th year Exam.
Time: 1 hours

Global Environmental Issues & Risks in Egypt (code: 402 E)

Answer all the following questions   (Total mark 35)

1- Write in the following   (15 mark)
   a) effect of ice melting on the sea level rise in the world
   b) Write in the Sharp Decrease of Forest Cover in the world?
   c) How is the climatic changes affect the biological diversity?

Question2   (10 mark)

   2- a- Show the global warming as an environmental problem, the mitigation against this issue?

   2- b- Write in the acid rains? Showing its negative effects on the environment?

3- Give a brief account in the following: (10 mark)
a) Write only one Item of environmental issues that discussed in COPE 27 in Sharm El- Shikh?
b) Discuss Desertification, ozone depletion and its negative impact on biodiversity

                          Best wishes

                          Prof M. Zyadah

Damietta University
Faculty of Science
Environmental Science Department

First Semester Exam
Date: 11/01/2026
Time: 1 hour

Global Environmental Issues Examination
For 4th Year Environmental Science Students' (Course Cod: ب 402)

Question 1 Choose the correct answer (11 marks):

1- Before El Nino begins, under normal conditions, cooler water upwells in the ......Pacific.

 (a) Eastern   (b) Western   (c) Middle

2- La Niña phenomenon occurs under a ....pressure change conditions.

 (a) high   (b) low   (c) moderate

3- The stable oxygen isotope ratio ($\delta^{18}O$) is expressed relative to the ratio of:

 (a) $^{18}O/^{16}O$ (b) $^{18}O/^{17}O$ (c) $^{16}O/^{17}O$

4-The Earth's ....is responsible for the timing of seasons.

 (a) Eccentricity (b) axial tilt   (c) Precession

5-High levels of tritium in ice core records indicate the occurrence of.......

 (a) Volcanic eruptions (b) Nuclear bomb (c) Solar radiation events

6-Ice core records demonstrate that glacial periods are associated with.........concentrations of atmospheric CO_2

 (a) high   (b) low

7-During heat waves, summer weather patterns .... those in winter.

(a) move faster than (b) move at the same speed as   (c) move slower than

8- When is the Urban Heat Island effect typically most intense?

(a) During rainy afternoons (b) At night   (c) At noon in the summer

9- The primary goal of extending containment booms during an oil spill is to:

(a) Disperse the oil into smaller droplets

(b) Sink the oil to the seabed for natural degradation.

 (c) Physically contain and concentrate the slick to prevent spread.

10- Which of the following indicators is most directly used to calculate a country's water stress?

(a) Water Use Intensity (b) Water Quality Index (c) Withdrawal-to-Availability Ratio (d) Precipitation Anomaly Index

11- A major point of disagreement in the GERD negotiations has been related to:

(a) The dam's design (b) The timeline for filling the reservoir (c) Relocation of affected communities

Question 2 (24 marks):

Complete the following sentences

1-………..circulation is large-scale atmospheric circulation pattern in the tropical Pacific Ocean, characterized by rising air over western Pacific and sinking air over eastern Pacific.

2- Mangroves are a group of trees that live in the coastal ……. zone.

3- The aboveground biomass (AGB) of a mangrove forest is estimated to be 400 tons per hectare. Belowground biomass (BGB) is approximately 30% of the AGB. The biomass carbon stock =………

4- Some microorganisms can colonize microplastics, leading to ……formation.

5- We are currently in the ………, an interglacial period that began 11,000 years ago.

6- Relative sea level rise is……………………………………………………………

7- Factors influencing heat waves are…..,……,……,………..

8- The urban heat island effect is caused by reduced ……cooling, resulting from the loss of vegetation.

9- After extraction, oil companies transport crude oil by pipes to processing plants called ……..

Best wishes

Dr. Rasha Abou Samra