



Final term Exam



Department: Zoology

Major:
Zoology/Chemistry

Course Title: Toxicology &
Environmental Pollution

Code number: 409 Z

Mark: 70

Date: 6/1/2025

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QUESTION ONE:

(20 Mark, 2 each)

1: What does environmental toxicology primarily focus on?

- a) The study of non-toxic substances in the environment
- b) The effects of toxic substances on the environment and living organisms
- c) The removal of toxins from the environment

2: Bioaccumulation refers to:

- a) The rapid breakdown of toxins in the environment
- b) The gradual build-up of toxins in the tissues of organisms over time
- c) The complete elimination of toxins from an ecosystem.

3: What does LD50 stand for in toxicology?

- a) Lowest Dose with 50% effect
- b) Lethal Dose with 50% mortality
- c) Limiting Dose with 50% tolerance

4: What is the main focus of ecotoxicology?

- a) The study of toxins in a controlled laboratory environment
- b) The effects of toxins on human health
- c) The effects of toxins on individual species and ecosystems

5: What is the impact of microplastics on terrestrial ecosystems?

- a) Increase the biodiversity
- b) Considered a natural resource
- c) they can disrupt soil structure and affect soil-dwelling organisms.

6: What is the effect of oil spills on marine ecosystems

- a) they improve water quality
- b) they can devastate marine habitats and harm marine life.
- c) they increase habitat richness

7: What is eutrophication?

- a) Excessive nutrients in water causing algal blooms and oxygen depletion
- b) Soil erosion
- c) Urbanization

8: What is the role of biodegradation in the fate of organic pollutants?

- a) It increases toxicity
- b) It breaks down organic pollutants into simpler, less harmful substances
- c) It promotes eutrophication

9: What is the main concern regarding microplastics in aquatic environments?

- a) Their role in plant growth
- b) Their impact on climate change
- c) Their ingestion by marine organisms and potential transfer through food chains

10: What is the main environmental concern associated with pesticides?

- a) Their persistence and potential to bioaccumulate in the environment
- b) Their rapid breakdown
- c) Their role in plant growth

QUESTION TWO:

(20 Mark)

- a. Write a short note on air pollution and responses that might occur when living organisms are exposed to toxic pollutants.
- b. Explain why knowledge of the fate of plastics is critically important in environmental protection and management.

QUESTION THREE:

(15 Mark)

Outline the regulatory networks currently in existence to control risks linked to toxic pollutants (air- water – and soil) pollution.

QUESTION FOUR:

(15 Mark)

Comment on the importance of wetlands in maintaining biodiversity and list the different main sources of pollution that can affect it.

With Best Wishes

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