

Bago University
Department of Botany
Second Semester Examination, September, 2019

Fourth Year (B.Sc)
Botany Specialization
Answer All Questions

Bot.4107
Applied Ecology
Time allowed: (3) Hours

I. Determine whether each statement is TRUE or FALSE.

(10 marks)

1. The peregrine falcon is broadly distributed across habitats and geographic regions.
2. Aquatic environments are particularly vulnerable to pollution.
3. Many introduced species are assimilated into communities without much obvious effect.
4. Parasitic wasps are undoubtedly over collected to provide herbarium specimens.
5. Priorities for marine conservation have lagged behind terrestrial efforts.
6. Some introduced species have become utterly dependent on people for reproduction.
7. Fire ants introduced from Argentina into the southern United States in ships' ballast.
8. *Andropogon pertusus* has become the commonest grass in lowland Jamaica.
9. In Britain, a large proportion of elm trees died in the 1970's.
10. Economic management of businesses involves decisions based on uncertain predictions.

II. Write correct word to complete the following sentences.

(10 marks)

1. Like all ecological populations, the human population is -----.
2. Global catches of marine fish ----- five-fold between 1950 and 1989.
3. Farmed resources are obtained by taking chosen ----- of plant or animal.
4. Fishing and hunting have been human ----- since our early history as hunter-gatherers.
5. The soil also serves as a store of essential ----- nutrients and water.
6. Agricultural land is also highly susceptible to ----- in arid and semiarid region.
7. Fresh water is used in crop irrigation and ----- consumption.
8. Inoculation is widely practiced in the biological control of pests in -----.
9. In agriculture, more ----- pests might lead to lower yields.
10. Ionizing radiation was the first ----- pollutant given national attention.

III. Answer all questions.

(10 marks)

1. Name the two species of natural enemy.
2. State the Integrated Farming Systems.
3. List the three main ways of habitat disruption.
4. Give only diagram of extinction vortices.
5. Define the strategic environmental assessment (SEA).

IV. Answer all questions.

(20 marks)

1. Give short note on *Anchoveta* and El Nino.
2. Write down the monoculture can maximize the rate of food production.
3. How does it emit gaseous waste into the atmosphere?
4. Write short note on habitat degradation by pollution.

V. Answer any three questions.

(30 marks)

1. Generalize about human population problem of Tropical Concerns.
2. Give a detail account on smog of wastes emitted into the atmosphere.
3. Explain why does it cause pollutants by nuclear accidents.
4. Write detail account on overexploitation.
5. Discuss the three kinds of uncertainty or variation of small populations.