

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

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

Bot.3110
Applied Ecology
Time allowed: (3) Hours

I. Determine whether each statement is TRUE or FALSE.

(10 marks)

1. Demographic transition refers both to an idealized pattern of changing birth and death rates.
2. The global population is homogeneous.
3. The numbers of fish in different size classes was known for the late 1960s.
4. Fishing and hunting have been human activities since our early history.
5. Rate of soil erosion might be about 2.0 metric tons per hectare per year.
6. The most cost- effective technology used in improving soil erosion.
7. Agricultural land is highly susceptible to degradation in arid and semiarid regions.
8. The evolution of insecticide resistance is simply natural selection in action.
9. The pest populations have exploded with disastrous consequences.
10. Carbon monoxide completes with oxygen for hemoglobin is a poison to human.

II. Write correct word to complete the following sentences.

(10 marks)

1. The sex ratio of lizards and alligators would change by nest -----.
2. Chlorofluro carbons are used in refrigerator cooling systems and as ----- propellants
3. The dominant organic contaminant is ----- oil.
4. Oil can kill directly through ----- and asphyxiation.
5. Winds carried ----- material over much of Europe
6. Mercury, used as an agricultural -----.
7. Individuals with levels of heterozygosity often have reduced -----.
8. Metapopulations will tend to persist for longer than unfragmented -----.
9. Captive propagation is attractive in its -----.
10. Zoos have recently become the center of a spirited -----.

III. Answer all questions.

(10 marks)

1. List two important reasons of the population problem.
2. What do you understand inoculations.
3. Defined genetic variation.
4. List the mention the three stages of captive breeding for conservation.
5. Enumerate the native nation of potato, peach, guava, coffee and oranges.

IV. Answer all questions.

(20 marks)

1. Defined maximum sustainable yield.
2. Give an account on forest protect soil from erosion, except when harvested by clear felling.
3. What are the effects of gaseous waste at three scale?
4. Briefly account on chains of extinctions.

V. Answer any three questions.

(30 marks)

1. How would define what is sustainability.
2. Explain about the contamination and conservation.
3. Define the term smog and explain its effect.
4. What is sewage and how are they effect.
5. Explain detail a review of risks facing species with related diagram.