

BOWEN UNIVERSITY, IWO
DEPARTMENT OF BIOLOGICAL SCIENCES
2012/2013 FIRST SEMESTER EXAMINATION

BLY 121: INTRODUCTORY ECOLOGY

Name: Matric No:

Department: Programme:

Answer all questions Time:

SECTION A

1. Define the following terms:

- (a) Population: _____

- (b) Territoriality: _____

- (c) Mortality: _____

- (d) Natality: _____

- (e) Immigration: _____

2. Result of population studies in a 5m² ecosystem are as follows:

Organism	Population size In2008	Population size In 2011
Dog	165	150
Goat	100	130

(a) Calculate the population growth rate of dog between 2008 and 2011.

(b) What was the population density of goat per metre square in 2008?

(20 Marks)

SECTION B

1. The environmental pollution problems have been compounded by
(a) _____ and (b) _____
2. Carbon monoxide (CO) combines with haemoglobin to form _____ thereby reducing the oxygen carrying capacity of the blood.
3. What are the effects of acid deposition on water bodies and aquatic lives?
(a) _____
(b) _____
(c) _____
(d) _____
4. Ozone is the triatomic form of oxygen which is formed naturally by _____

5. The green house gas produced by anaerobic bacteria living in muddy areas, guts of certain insects is _____
6. Air pollutants can be divided into two categories _____ and _____
7. Particulate matter of the atmosphere pollutants include _____
_____ and _____
8. Ozone is useful in that it
(a) _____
(b) _____
(c) _____
(d) _____
9. The consequences of discharge of industrial wastes in our environment include:
(a) _____
(b) _____
(c) _____
(d) _____
(e) _____
(f) _____
10. Agricultural wastes are washed off from and into the aquatic system through _____
_____ and _____
11. Solid wastes include class of materials such as _____
_____ and _____
12. Global environmental problems include _____
and _____ (25 Marks)

SECTION C

1. Abiotic components includes the atmosphere, _____ and _____.
2. Earth's living organisms interacts with their abiotic environment to form a plant and vast ecosystem called _____.
3. Illumination is measured in _____.
4. On the basis of light factor, plants are classified into _____ and _____.
5. The stems of plants are _____ phototropic while the roots are _____ phototropic.
6. Oriented locomotory movements towards and away from a source of light is called _____.
7. _____ is a measure of the intensity of heat.
8. Cold loving microorganisms are called _____.
9. Cold blooded animals whose body temperature cannot be regulated are called _____.
10. Differentiate between 'Hibernation' and 'Aestivation'.
(a) _____
(b) _____
11. _____ is an orderly, progressive sequence of replacement of a community over a given area of locality.
12. The first group of organisms establishing a community are called _____.
13. Differentiate between 'Commensalism' and 'Ammensalism'.
(a) _____
(b) _____
14. Parasites that live outside of the host are called _____ while those that live within the body of the host are called _____.
15. _____ is the relationship where one population adversely affects the other by direct attack.
16. Define the term "Autotrophic Succession".

17. The plants growing on other plants for support are called _____ while those growing on the surface of animals for support are called _____.

(25 Marks)

Section A (20Marks)	Section B (25 Marks)	Section C (25 Marks)	Total score (70 Marks)