

PART B
FUNDAMENTALS OF ECOLOGY (ZOU 2265)
N.B.T - 2006 / 2007

REGISTRATION NUMBER : _____

2.

2.1 List the main reservoirs of the elements given below.

Carbon _____ Sulphur _____

Oxygen _____ Nitrogen _____

Phosphorous _____

2.2 Indicate the form or forms of the following elements that are found in living organisms.

Carbon _____ Sulphur _____

Oxygen _____ Nitrogen _____

Phosphorous _____

2.3 State three basic features of a typical nutrient cycle.

2.4 Explain the role played by the nutrient cycles in nature.

a) _____

b) _____

2.5 State the organism / s that involved in the following processes.

Nitrification _____

Fixation of atmospheric nitrogen into organic nitrogen compounds _____

Conversion of H₂S into sulphate groups _____

2.6 Briefly explain the following processes.

Ammonification

Carbon fixation

De-nitrification

2.7 What are the natural sources of phosphorous ?

2.8 List the main steps involved in the cycling of phosphorous.

2.9 State two methods by which excess phosphates are accumulated in water bodies.

- a) -----
- b) -----

2.10 What can you expect when there is excess phosphates in a water body ?

PART B
FUNDAMENTALS OF ECOLOGY (ZOU 2265)
O.B.T - 2006 / 2007

REGISTRATION NUMBER : _____

2.

2.1 Explain what you understand by the term "Growth" of a closed population.

2.2 How do you describe the pattern of growth seen in a population having overlapping generations, if the resources are unlimited ?

2.3 Explain the changes that you would expect, in the growth of a population with overlapping generations if exposed to an environment with limited resources.

2.4 Describe the pattern of growth curve that you will obtain for the population under the conditions stated in question no. 2.3.

2.5 State the growth model that matches with the growth pattern indicated in question no.2.4 .

2.6 Indicate the impact of "Environmental resistance" in reaching the carrying capacity of a population.

2.7 What can you predict about the growth of a population at its carrying capacity ?

2.8 State the factors affecting population regulation at carrying capacity in nature.
