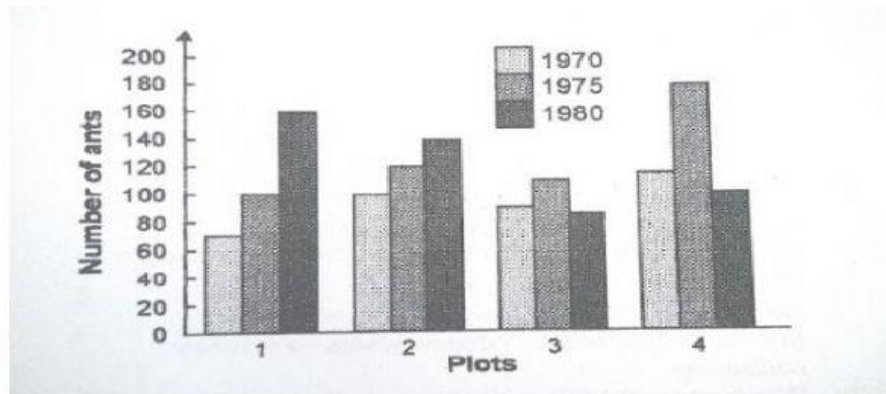


4. Population Ecology (2)

Class Test 2: Population Ecology

Questions 1.1 and 1.2 relate to the graph below, showing the number of ants in four test plots of the same size in a garden. The experiment was repeated on three successive occasions, five years apart.



1.1 What is the difference in population size between plot 1 and plot 3 in 1980? *

- ☐ 40
- ☐ 75
- ☐ 90
- ☐ 130

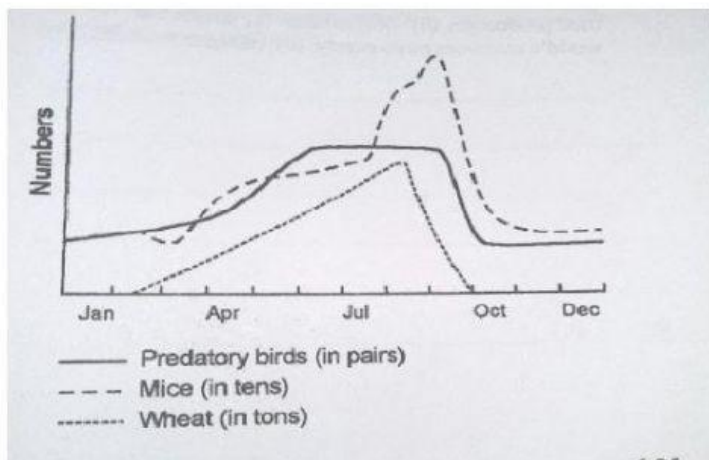
1.4 Which is NOT TRUE of predator-prey graphs? *

- ☐ there are always two fluctuating lines
- ☐ of the two lines the prey line peaks the highest
- ☐ the predator line peaks before the prey line
- ☐ the prey usually decreases before the predators

1.5 Which of the following statements is NOT TRUE about the relationship between the predator and its prey? *

- ☐ there is interspecific competition
- ☐ increased number of predators causes a decreased number of prey
- ☐ decreased number of predators causes an increased number of prey
- ☐ the predator level is a density dependent factor controlling prey population

1.6 The data in the given figure refer to a specific area. Which ONE of the following conclusions CANNOT be made from the given data? *



- ☐ a large number of birds die during December
- ☐ the mouse population varies according to the amount of wheat available
- ☐ the wheat is harvested in August
- ☐ the birds eggs hatch during May

1.7 Territoriality benefits the population because it: *

- ☐ promotes the immigration of other species
- ☐ accelerates the mortality rate of the species involved
- ☐ can ensure ample food and shelter for the species involved
- ☐ has a negative influence on the natality rate of the population

1.8 Which one of the following DOES NOT adequately explain why the world population approximately two hundred and 40 years go, in 1780, was as low as 750 million? *

- ☐ the population density of each mainland was small
- ☐ mortality was high due to poor medical care
- ☐ natality and fecundity were high
- ☐ exponential growth was slow due to there being fewer people

1.9 A realistic way of solving the problem of population growth in Third World countries is to: *

- ☐ increase food production
- ☐ limit natality
- ☐ divide the world's resources more evenly
- ☐ increase mortality

Questions 1.10 - 1.12 refer to the table below which shows birth rates, death rates and overall population growth in four different countries. To which country does each of the following apply?

	Country			
	A	B	C	D
Birth rate (%)	5	5	3.5	2
Death rate (%)	3	2	1.5	1
Overall population growth (%)	3	3	2	1

1.10 The health of old people has improved considerably and birth control methods are beginning to have an effect. *

- ☐ Country A
- ☐ Country B
- ☐ Country C
- ☐ Country D

1.11 People have large families, but infant mortality is high and adults have a short life expectancy. *

- ☐ Country A
- ☐ Country B
- ☐ Country C
- ☐ Country D

1.12 Food supply and medical services have improved, but birth control measures are ineffective. *

- ☐ Country A
- ☐ Country B
- ☐ Country C
- ☐ Country D

1.13 Which of the following population parameters is responsible for the exponential growth in developing countries? The?.... rate is too high. *

- ☐ natality
- ☐ immigration
- ☐ mortality
- ☐ emigration

1.14 Which of the following is a density-dependent factor? *

- ☐ floods
- ☐ drought
- ☐ temperature
- ☐ predation

1.15 Which one of the following is NOT characteristic of r-strategists? *

- ☐ have a large number of offspring
- ☐ a relatively short life span
- ☐ high degree of parental care
- ☐ offspring are small and mature rapidly