

20. Human influences on ecosystems

20.1 Food supply

Paper 1 and 2

Question Paper

Paper 1

Questions are applicable for both core and extended candidates

1 What is an effect of an increase in the use of insecticides?

- A** decreased competition between crop plants and weeds
- B** decreased numbers of extinctions
- C** decreased numbers of pollinators
- D** decreased use of fertilisers

2 What can be used to reduce competition between crop plants and weeds?

- A** fertilisers
- B** herbicides
- C** insecticides
- D** pollinators

3 Wheat is often grown in large areas as a monoculture.

What is a negative environmental impact of this method of farming?

- A** The variety of species in the area is reduced.
- B** Fewer types of pesticide are needed.
- C** Larger harvests can be produced.
- D** Specialist machinery can be used.

Paper 2

Questions are applicable for both core and extended candidates

- 4 *Fusarium* wilt is a fungal disease of bananas that can spread quickly through a banana population.

The table shows the area affected by *Fusarium* wilt over time in one country.

| year | area affected with <i>Fusarium</i> wilt / hectares |
|------|---|
| 1967 | 0 |
| 1970 | 100 |
| 1976 | 1200 |
| 1983 | 1500 |
| 1999 | 3000 |

What was the percentage increase in the area affected with *Fusarium* wilt from 1976 to 1999?

- A** 40% **B** 60% **C** 150% **D** 250%

- 5 What is an advantage of growing crops as a large-scale monoculture?

- A** Biodiversity is increased.
- B** Genetic variation is increased.
- C** Water use is increased.
- D** Yield of the crop is increased.

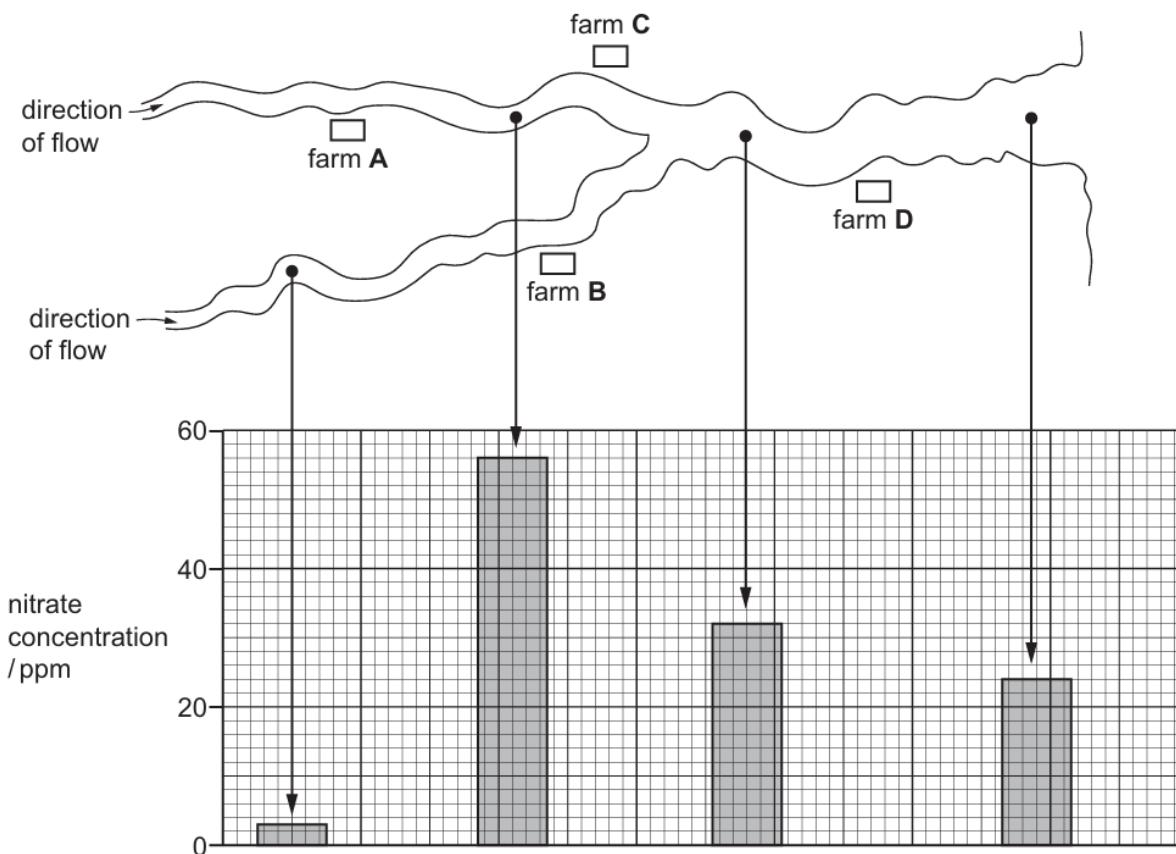
- 6 Wheat plants are often grown in large areas as a monoculture.

What is a negative environmental impact of this method of farming?

- A** The variety of species in the area is reduced.
- B** Fewer types of pesticide are needed.
- C** Larger harvests can be produced.
- D** Specialist machinery can be used.

- 7 The diagram shows the positions of four farms and the concentrations of nitrate at different points in a river.

Which farm is likely to have been using too much fertiliser on its land?



- 8 What is an effect of an increase in the use of insecticides?

- A decreased competition between crop plants and weeds
- B decreased numbers of extinctions
- C decreased numbers of pollinators
- D decreased use of fertilisers