<u>Human influences on ecosystems – 2023 November IGCSE 0610</u>

1. Nov/2023 /Paper_ 0610/11/No.38

What can increase as a result of deforestation?

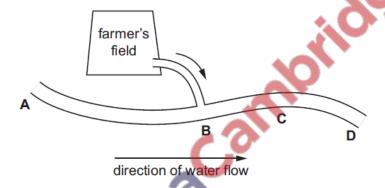
- extinctions 1
- 2 flooding
- 3 biodiversity
- 1, 2 and 3
- B 1 and 2 only C 1 and 3 only
- **D** 2 and 3 only

2. Nov/2023 /Paper_ 0610/11/No.39

The diagram shows the position of a farmer's field near a river.

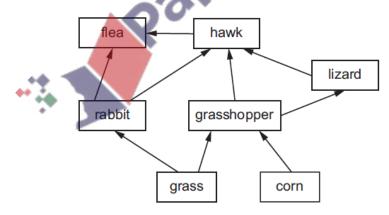
The farmer uses chemical fertilisers that drain into the river, causing pollution. High concentrations of the chemical fertiliser result in increased growth of aquatic plants.

At which point is the growth of aquatic plants the least affected by fertilisers



3. Nov/2023 /Paper 0610/11/No.40

The diagram shows a food web.



Which food chain shows a correct flow of energy through the web?

- A corn \rightarrow grasshopper \rightarrow hawk \rightarrow lizard
- grass \rightarrow grasshopper \rightarrow hawk \rightarrow rabbit
- grass \rightarrow rabbit \rightarrow hawk \rightarrow flea
- **D** corn \rightarrow grass \rightarrow rabbit \rightarrow hawk

4. Nov/2023 /Paper_ 0610/21/No.38

During eutrophication, what causes the death of fish?

- increased growth of producers
- В increased photosynthesis by producers
- decreased concentration of carbon dioxide in the water С
- **D** decreased concentration of oxygen in the water

5. Nov/2023 /Paper 0610/21/No.40

ridge Some ways in which humans make use of organisms are listed.

- using yeast to produce ethanol 1
- 2 artificial selection of sheep with thick wool
- using bacteria to produce human substances

What are examples of genetic modification?

A 1 and 3

1 only

3 only

6. Nov/2023 /Paper_ 0610/22/No.39

One method of conserving fish stocks is to have a minimum mesh size for fishing nets.

How is the mesh size chosen to conserve a particular fish species?

- Α The holes in the net must be small enough to catch only young fish.
- В The holes in the net must be small enough to catch all fish old enough to reproduce.
- C The holes in the net must be large enough to catch some fish of all ages.
- **D** The holes in the net must be large enough to allow young fish to escape.

7. Nov/2023 /Paper_ 0610/23/No.37

An increased concentration of nitrates in water may result in the death of fish because of eutrophication.

Some stages of eutrophication are given.

- increased aerobic respiration by decomposers
- 2 increased decomposition after death of producers
- 3 increased growth of producers
- 4 reduction in dissolved oxygen

What is the order of these stages that results in the death of fish?

- $A \quad 1 \rightarrow 4 \rightarrow 3 \rightarrow 2$
- **B** $1 \rightarrow 2 \rightarrow 4 \rightarrow 3$
- $\textbf{C} \quad 3 \rightarrow 2 \rightarrow 1 \rightarrow 4$
- **D** $3 \rightarrow 4 \rightarrow 2 \rightarrow 1$

8. Nov/2023 /Paper 0610/23/No.38

Carribildo Which word describes the number of different species in an area?

- A biodiversity
- **B** community
- C ecosystem
- D population

9. Nov/2023 /Paper_ 0610/31/No.4

Fig. 4.1 is a photograph of part of a kitchen.



Fig. 4.1

(a)	Describe methods of maintaining hygiene in the home that reduce the spread of disease.
	••
	[4]

(b)	State two ways that pathogens can be transmitted indirectly.	
	1	
	2	
		[2]
(c)	State three body defences against infection.	
	1	
	2	
	3	
		[3]

[Total: 9]

Papacambridge

(a)	Humans have developed modern farming methods to increase food production.
	Explain how the use of herbicides and chemical fertilisers has increased food production.
	[41
	Palpa Califilation (4)

10. Nov/2023 /Paper_ 0610/31/No.8(a _ b)

(b) Fig. 8.1 shows intensive farming of chickens.

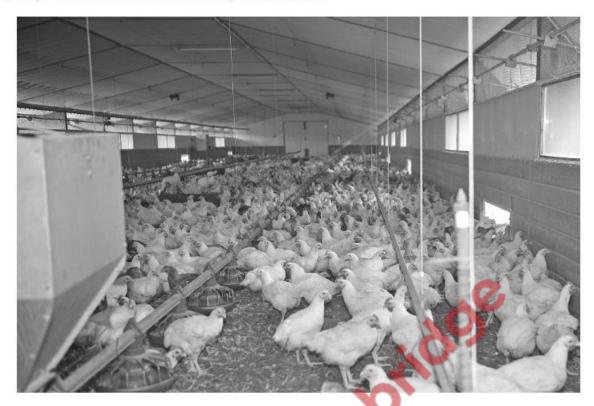


Fig. 8.1

State three disadvantages of intensive livestock production.

1	
2	
.01.0	120
3	
·	
	[3]

	2023 /Paper_ 0610/33/No.7(c _ d) Lionfish are an example of a foreign species that has been accidentally introduced to many marine habitats.
	Describe the harmful consequences of introducing a foreign species to a habitat.
	TO TO
(d)	Removing introduced species from habitats is one method of conserving endangered species.
(u)	Describe other methods of conserving endangered species.
	C
	[3]