
THINKING SKILLS

Paper 2 Critical Thinking

9694/23

May/June 2018

1 hour 45 minutes

No Additional Materials are required.

READ THESE INSTRUCTIONS FIRST

An answer booklet is provided inside this question paper. You should follow the instructions on the front cover of the answer booklet. If you need additional answer paper ask the invigilator for a continuation booklet.

Answer **all** the questions.

The number of marks is given in brackets [] at the end of each question.



This document consists of **6** printed pages, **2** blank pages and **1** Insert.

1 Study the evidence and answer the questions that follow.

Source A**Report from magazine *International Conservationist***

A protected lion called Albert was found shot dead in Nambutu last Tuesday. A sophisticated firearm had been used. Albert was a great favourite with tourists on safari (a key aspect of the local economy) and there has been international outrage at his being killed. His death may have been the work of poachers or illegal big game hunters. Although Albert was protected by the law, there is a great deal of government corruption and the international rich are prepared to pay a high price for a 'trophy lion'. Also, the situation is complicated by the fact that some hunting and culling of younger adult lions is allowed.

Source B**Report from Nambutian government newsletter**

Villagers in Nambutu have been losing livestock to a predator. The wounds on the livestock are consistent with being from a lion attack. The villagers are humble subsistence farmers, who have little sympathy with the wider international concerns of conservation. They would have had a strong motive to kill the predator.

Source C**Political pamphlet from the Nambutu for Its People party (NIP)**

We pledge to prevent foreign outsiders interfering in Nambutu affairs. Lions are noble beasts but they can have a devastating effect on our local farmers. They must be controlled and therefore NIP proposes relaxing the laws on hunting lions. This will boost the economy. Vote for NIP and allow us to build on the progress made in our previous 10 years of government. Don't believe what you read in the foreign press – rely on our own Nambutian newspapers, with their strong traditions of independent reporting.

Source D**e-mail from big game hunter to Nambutu government minister**

Nice hunting! Thanks for arranging the kill. Pity we couldn't take the beast with us but I understand the difficulties. We have plenty of photos! The cheque is in the post.

Source E**Statement by conservation officer**

The death of Albert was a tragedy. Our patrols have had a great deal of success in combating poaching and illegal hunting. The evening he was killed we were alerted to a threat from poachers in the north of the region and so we concentrated our manpower there. The threat turned out to be a false alarm, but it did mean that the area in which Albert roamed was not as well patrolled that night as it would normally have been.

- (a) How significant is the information in Source A that a 'sophisticated firearm had been used'? [3]
- (b) Explain why the evidence in Source B may not be very useful. [3]
- (c) How useful is the information in the e-mail in Source D? [3]
- (d) How likely is it that Albert was killed by a big game hunter?
Write a short, reasoned argument to support your conclusion, with critical reference to the evidence provided and considering a plausible alternative conclusion. [6]

2 Study the evidence and answer the questions that follow.

Source A**Extract from a statement by a national veterinary association**

It is vital that owners of cats get them vaccinated against cat flu. Kittens should be vaccinated at 9 weeks followed by a second injection at 12 weeks. After this, annual booster injections should be given. Owners should not be swayed by reports in the press that there are adverse side effects arising from these injections – such side effects are extremely rare.

Source B**Extract from a pamphlet from a cat rescue organisation**

Two types of cat flu are vaccinated against: feline herpes virus (FHV-1) and feline calicivirus (FCV). These viruses are widespread in the outdoor environment and vaccination will protect your cat against prolonged illness. The responsible cat owner should give serious consideration to having their cat vaccinated.

Source C**Extract from article in *Your Cat* magazine**

Many pet owners have negative experiences regarding vaccination against cat flu. Cats can develop symptoms of the illness despite vaccination and some cats can become lethargic and lose their appetite after their annual booster injection. Given that cat flu is not necessarily fatal, such owners may conclude that vaccination is best avoided. There are other ways of combating the threat of diseases such as cat flu. For example, a good diet and the regular application of flea and tick repellent can be used to build up a cat's immune system. If the cat lives entirely indoors then the risk of contact with the flu viruses is extremely low.

Source D**National variations in incidence of cat flu**

<i>Country</i>	<i>% of cats vaccinated</i>	<i>% of cats getting cat flu</i>	<i>% of cats kept entirely indoors</i>
UK	75	10	20
USA	90	25	35
Germany	50	10	20
South Africa	10	50	5
Malaysia	5	5	90

Source E

Extract from brochure for *Happy Catty* boarding home for cats

Owners wishing to place their cats in Happy Catty must show evidence of an up-to-date vaccination record for their pets. Where many cats live in close proximity the risk of disease spreading is great. We cannot admit pets without this evidence. Owners should rest assured that, in the unfortunate event of their cat becoming ill or injured during their stay with us, our partner company, Vets for Pets, provides 24-hour-a-day medical cover.

- (a) Look at Source B. Suggest **two** reasons why one cannot conclude that cat flu will cease to be a problem for cats which are vaccinated. [2]

- (b) “If the cat lives entirely indoors then the risk of contact with the flu viruses is extremely low.” (Source C).

Suggest and explain **one** weakness in using this information as sufficient grounds for keeping a cat indoors. [2]

- (c) (i) Source C implies that cats that live indoors do not need to be vaccinated.

Identify and explain the data in Source D which shows that some cats that are kept indoors are nevertheless vaccinated against cat flu. [2]

- (ii) Look at Source D. Suggest **three** possible explanations for the percentage of cats getting flu in the UK being the same as in Germany, in spite of vaccination rates being higher in the UK. [3]

- (d) ‘It is unnecessary to vaccinate cats against cat flu.’

To what extent do you agree with this claim? Write a short, reasoned argument to support your conclusion, using and evaluating the information provided in Sources A–E. [6]

3 *Read the passage and answer the questions below.*

- 1 There has been a lot of bad publicity recently for cars with diesel engines. Many people bought these cars thinking they were more environmentally friendly because they emit less carbon dioxide than petrol-engined cars. However, some have argued that the soot particles emitted by diesel engines are making a major contribution to air pollution in cities and are therefore worse for people's health. This suggests it is unethical to own a diesel car, but owners of diesel cars should not rush out to sell them.
- 2 There are many causes of poor air quality in cities. Factories belch out fumes and air pollution is often brought in on prevailing winds from areas many miles away. There is not much point bothering about emissions from your diesel engine while this is the case. If you don't live in a city, this issue need not concern you anyway.
- 3 Manufacturers of diesel engines now fit 'diesel particulate filters' (DPFs), showing they have an ethically responsible concern for reducing the level of harmful emissions from diesel engines. It has been a legal requirement for many years for diesel engines to be fitted with a DPF. If you drive a modern diesel car you can drive with a clear conscience.
- 4 It is accepted, even by their opponents, that diesel engines do not contribute as much to global warming; they are more efficient and consume fewer litres of fuel per kilometre than a petrol engine and emit less carbon dioxide. Emission of carbon dioxide into the atmosphere is the major contributor to global warming. There is little point in switching to a petrol-engined car on ethical grounds.
- 5 The fuel efficiency of diesel engines is just one of many advantages they have over petrol engines. They are more robust and last for many more kilometres than petrol engines. They are a superior type of engine. This is why lorries and buses all have diesel engines.

- (a) Using the exact words from the passage as far as possible, identify the main conclusion. [2]
- (b) Using the exact words from the passage as far as possible, identify **three** intermediate conclusions. [3]
- (c) Evaluate the strength of the reasoning in the argument. In your answer you should consider any flaws, unstated assumptions and other weaknesses. [5]
- (d) 'The driverless car will introduce problem-free motoring.'

Write your own short argument to support **or** challenge this claim. The conclusion of your argument must be stated. Credit will not be given for repeating ideas from the passage. [5]

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