
THINKING SKILLS

9694/22

Paper 2 Critical Thinking

May/June 2016

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**Extract**

from *'The Alien Big Cat Phenomenon'*

Phantom cats, also known as Alien Big Cats (ABCs) – large felines, such as jaguars, cougars, and panthers – allegedly appear in regions outside their normal range. Sightings, tracks and possible kills have been reported in a number of countries, including the UK, Australia, Ireland, New Zealand, Finland, Denmark, Eastern United States, Hawaii, Italy and Luxembourg. For example, in 2005 a black cougar was allegedly spotted on several occasions in a wildlife reserve in the Netherlands, but the animal, nicknamed Winnie, was later identified as an unusually large crossbreed between a domestic and a wild cat. However, many people who have seen these big cats remain convinced that they are real and not just a false or mistaken perception. A retired policeman in the UK stated that one crossed the road in front of him and that it was probably about 1 metre high and 2 metres long, with a black, glossy, shiny coat, and incredibly muscular. Before this sighting he had been very sceptical about the existence of such animals.

Source B**Newspaper report**

from *the Trimtown Echo*

Two pensioners, out walking, believe they stumbled across the fabled 'Beast of Trimtown' eating its kill. Herbert and Doreen Bukowski say they saw the creature, which is said to be the size of a husky or labrador, in a local wood. They quickly took a photo with the camera they had with them. There have been several other sightings in Trimtown. Another pensioner, Rita Pitt, described her sighting: "What struck me is that it was so very, very black and was much bigger than a dog." Jim Card, 73, and his wife Anna, 71, have seen a panther-like creature in the town. He said: "I've seen it walking up the drive in the middle of the night without a care in the world."

Source C**Extract**

from *'The Mind Plays Tricks'*

Whilst it is undeniable that many people claim to have seen large cats in places they shouldn't exist, we can be certain these sightings are figments of their imagination. Three-quarters of all the cats reported are black, and they are commonly described as glossy and muscular. It seems odd that there is not more variety in these sightings. Large cats are creatures of regular habits. They have territories, dens in which cubs are raised, spraying points and scratching posts. They scatter print and hairs wherever they go. Yet nobody has found any evidence of this type to confirm the existence of large cats. Whilst there have been some photos, none of these is convincing. Some people attempt to explain this lack of clear photographic evidence in terms of the shyness and elusiveness of these animals. However, convincing photographic evidence of shy and elusive large cats in their natural habitat, such as the snow leopard of the Himalayas, has been produced. Most damning of all, nobody has ever managed to capture or kill one of these supposed 'big cats'.

Source D**Extract**

from a psychology textbook

It seems likely that many of the 'big cats' that people see are precisely that – big domestic cats. In an experiment, a large black domestic cat was placed in the same spot where an Alien Big Cat had been sighted, and photographed from where the original photographer had been. The domestic cat actually looked slightly bigger than the supposed Alien Big Cat. Another piece of convincing evidence is that a photo of another supposed Alien Big Cat showed that its eyes featured vertical slits. This is a feature of domestic cats – genuine 'big cats' have round pupils.

Source E**Extract**

from 'Guide to UK Laws Governing Animal Ownership'

The Dangerous Wild Animals Act was a law passed in the UK in 1976. It was designed to control the increasingly popular practice of keeping wild animals, such as leopards, as pets. The passing of the act meant that anybody wanting to keep such an animal would have to have a licence, specialist accommodation for the animal and public liability insurance. These measures were expensive and it is thought that many people who could not afford these extra costs may have released their exotic pets into the wild rather than have them put down.

- (a) How reliable is the evidence in Source B about 'big cat sightings'? [3]
- (b) How useful is the evidence in Source D? [3]
- (c) How significant is the evidence in Source E? [3]
- (d) What is the most likely explanation for the reported sightings of Alien Big Cats? 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 environmental magazine

Dredging is a process used to deepen river channels by digging out sediment from the bottom. This increases the amount of water they can hold, and is often used to keep waterways navigable. People often see dredging as the solution to the problem of rivers flooding on flood plains. This may seem logical, as dredging does increase the capacity of the river. Where dredging has not taken place for many years, the capacity could be increased by 50%. However, the volume of flood water on the flood plain is far in excess of what the river channel could take, so this 50% increase could translate into a figure of a 1–2% increase in the rate at which flood water is dispersed. Moreover, dredging creates a number of problems, including causing areas downstream to flood more readily and harming wildlife, such as water voles and otters, that live by the river.

Source B

Information sheet

from US Environment Agency

The Hudson is an iconic American river, steeped in American history. However, an era of industrial pollution left its mark. Polychlorinated biphenyls, or PCBs, were widely used as fire preventatives and insulators in the manufacture of electrical devices, like transformers and capacitors, because of their ability to withstand exceptionally high temperatures. During a 30-year period ending in 1977, when the production of PCBs was banned, it is estimated that approximately 600 tonnes of PCBs were discharged into the Hudson, which wiped out much of the river's wildlife. However, in the last 10 years a programme of dredging has cleaned up the river by removing the PCB contaminated sediment. Wildlife is beginning to return to the river.

Source C

Extract

from magazine article

Opponents of dredging rivers often suggest that in making rivers flow faster, dredging simply transfers the problem of flooding further down the river. However, this ignores the point that rivers eventually reach the sea. If rivers prone to flooding are dredged right to the sea, then the problem is not simply transferred downstream: it is solved by discharging the water into the sea more efficiently. This prevents the build-up of water which causes flooding. An analogy might be with the efficiency of a three-lane highway. If the highway suddenly reduces to a single lane it is true that the problem of traffic congestion has simply been transferred up the highway. However, if the three lanes are maintained all the way to a final destination, then three-lane highways are efficient in moving traffic more effectively. By the same token, a river that is dredged all the way to the sea will be more efficient at discharging water than a river that is not dredged.

Source D**News report**

A study commissioned by the Dutch Ministry of Infrastructure and the Environment means more bad news for proponents of the plan to deepen the River Elbe in Germany. The report confirms that further dredging could result in severe ecological damage. Supporters of the plan argue that a deepening of the river through dredging is necessary to accommodate new, bigger ships which require a depth of 14.5 metres. Failure to do this will mean the long term decline of Hamburg, the main port on the Elbe.

Source E**Dredging on River Gambo**

Amount of material dredged in tonnes				
1985	1990	1995	2005	2010
no dredging	180	145	160	170

- (a) Look at Source A. The author does not offer a conclusion.
- (i) Identify the conclusion which is implied by the reasoning in the passage. [1]
- (ii) Identify an unstated assumption upon which this conclusion would rely. [2]
- (b) 'Highways are man-made, whereas rivers are natural features.' To what extent does this difference undermine the use of the analogy drawn in Source C between dredging rivers and building three-lane highways? [3]
- (c) The data given in Source E is not sufficient to draw any conclusions about the effectiveness of the dredging on flood prevention. Suggest **three** of the pieces of additional information which would be necessary in order to draw such a conclusion. [3]
- (d) 'Dredging is ineffective therefore it should be discouraged.'

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 Paintings by famous artists such as Titian and Monet have risen to astronomic price levels in the last 50 years. A price of tens of millions of dollars for a single painting is by no means unusual. This is because the international rich see the purchasing of such art as a good investment. Paintings are now little more than a form of currency, a 'banknote', worth millions. This has undermined the aesthetic value of these works of art.
- 2 A painting that was once on display in a room in a house is now locked in a vault as if it is gold bullion which, in a sense, it has effectively become. Fewer and fewer people in the world can afford to buy these paintings. If this trend continues, eventually no-one will be able to enjoy works of art.
- 3 An artist should create a picture for purely aesthetic reasons and be moved to paint as a result of an inner spiritual drive. A painting created in order to make money is not a true work of art. The artist Van Gogh never sold a painting during his lifetime, so we can be sure that his work is true art and the product of this inner spiritual drive – his pictures now sell for millions of dollars.
- 4 Other forms of art have succeeded in avoiding the above problem. Whilst they command reasonable prices, first editions of the novels of Charles Dickens, for example, or the original score of a Mozart opera do not command the millions at auction that famous paintings do. This shows that action could be taken to combat the problem of paintings becoming a form of currency.
- 5 The art establishment should take immediate action to prevent artworks from becoming a form of investment. Only an international agreement that these works of art could not be bought or sold would remove them from the clutches of the super-rich.

(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) 'Painting makes no contribution to society.'

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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