



Cambridge International AS & A Level

THINKING SKILLS

9694/23

Paper 2 Critical Thinking

May/June 2020

1 hour 45 minutes



You must answer on the enclosed answer booklet.

You will need: Answer booklet (enclosed)

INSTRUCTIONS

- Answer **all** questions.
- Follow the instructions on the front cover of the answer booklet. If you need additional answer paper, ask the invigilator for a continuation booklet.

INFORMATION

- The total mark for this paper is 50.
- The number of marks for each question or part question is shown in brackets [].

This document has **8** pages. Blank pages are indicated.

Section A

Study the evidence and then answer questions 1 and 2.

Source A**Advertisement from private health clinic**

*Peace of mind because you acted in time
Our Full Body Scan provides immediate insight into your health*

A Full Body Scan is a complete physical examination, aimed at detecting how likely you are to develop specific medical conditions. If detected in time, treatment may be available which will slow down the development of the condition or completely cure it. The key focus is on heart disease, cancer and dementia. We can also highlight hereditary factors which make you likely to develop these conditions. Recognising risk will mean effective action can be taken to safeguard your health.

Source B**Extract from magazine for health professionals**

Many of the screening tests offered by private health care companies are a waste of time and can even be positively harmful. The carotid artery scan is particularly ill-advised, because the risk of a stroke or death from the treatment (i.e. a carotid endarterectomy) is greater than if things are left alone. So health screening for this condition means such people know that they are at increased risk of a stroke but there is not a safe way of dealing with the condition. Health care companies are not only exploiting people's anxiety about their health for financial gain but they are also contributing to this anxiety.

Source C**Research paper on screening**

Health screening is not as effective as it first appears. A false impression is given if all cases of a condition are simply compared. Cases where an unscreened population have sought medical advice because they have detected symptoms of a health condition are likely to have more severe forms of the condition than those in whom the condition has been detected through screening. This means that the recovery rate in the screened population will be better.

Source D**Extract from science journal**

An important distinction when judging the effectiveness of health screening is whether it is intended to detect a life-threatening condition, such as cancer, which the individual has developed but is not yet showing any symptoms, or whether it is intended to identify a heightened risk of developing such a condition. The latter is merely speculative and open to the objection that risk is an inherent feature of life. The former, however, is not speculative, and early treatment will mean that the individual is much more likely to be cured of the condition. We should, therefore, support health screening in the former case, even if objecting to it in the latter. Screening could be used to detect non-life-threatening conditions, but because they are not life-threatening, people are unlikely to regard such screening as worthwhile.

Source E

Promotional leaflet from pro-screening lobbying group

Health screening has been shown to extend life in patients diagnosed with cancer. For example, Bert was diagnosed with lung cancer through screening, and he lived for 6 years after his diagnosis, whereas Fred, who was not diagnosed by his doctor until he presented with symptoms, lived for only 3 years after receiving his diagnosis. This is convincing evidence of the benefits of health screening. Critics may say that health screening is too expensive, but even in a world where difficult choices have to be made regarding health expenditure, we can be sure that the money spent on health screening is justified.

- 1 (a) How reliable is Source A? [3]
- (b) (i) Suggest and explain **one** reason why the evidence in Source B is significant in criticising health screening. [2]
- (ii) Suggest **two** reasons why the evidence in Source B is **not** significant in criticising health screening. [2]
- (c) (i) Identify the conclusion in the last sentence of Source D. [1]
- (ii) Suggest **two** possible challenges to the conclusion drawn in the last sentence of Source D. [2]
- (d) Identify and explain **two** weaknesses in the support given in Source E for its claim that "Health screening has been shown to extend life in patients diagnosed with cancer." [4]
- 2 *You are advised to spend some time planning your answer before you begin to write it.*

'People should avoid health screening.'

To what extent do you agree with this claim? Write a short, reasoned argument to support your conclusion, using and evaluating the evidence provided. [8]

Section B

Read the following passage and then answer questions 3, 4 and 5.

- 1 Drones are small, remote-controlled devices that fly through the air. Many people are opposed to their development, but we should welcome them. A reactionary minority have always been against new technological developments, but fortunately they have not been able to halt the march of progress.
- 2 Drones promise to revolutionise the way shopping deliveries are made. With the development of the internet and online ordering there has been an enormous expansion in the quantity of goods being delivered to people's houses. Most expert commentators say this trend will continue and that actual shops on the high street will decline in importance. These deliveries made by diesel-fuelled vehicles contribute greatly to the amount of pollution in the atmosphere and also to congestion on the roads. Deliveries made instead by drone will make a significant contribution to improving the environment.
- 3 Drones can make a significant impact on the preservation of law and order. They can be used to monitor suspicious activity in a much more flexible way than security cameras, as they can move around and track such activity. Policing methods need to keep up with ever more sophisticated high-tech crime. Using drones is preferable to seeing a collapse of law and order.
- 4 Some people think drones should only be used by professionals with a licence. However, much harmless entertainment can be derived from using drones for leisure purposes. Taking aerial photographs used to be very expensive but now the ordinary individual can take them using a drone with a camera attached. There has been some comment about the risk to aircraft if they are used near airports. However, the risk posed by lasers is as much, if not greater.
- 5 Drones are extremely useful in emergency situations – for example, natural disasters such as earthquakes and floods. They can give aid workers and rescuers a clear idea of the scope of the disaster by sending pictures, including video, back to them. This means that aid can be delivered more quickly to the victims of the disaster, thereby decreasing the number of fatalities.
- 6 People who want to ban drones should be mindful of the huge impediment to human progress that this would cause. They are like those people who insisted that early motor vehicles had to be escorted by a man with a red flag.

- 3 (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*. [6]
- (c) Identify an *unstated assumption* required by the reasoning in paragraph 2. [2]
- (d) Identify the following argument element from paragraph 4:
 'drones should only be used by professionals with a licence' [2]
- 4 (a) Evaluate the *appeal to history* in paragraph 1. [2]
- (b) Identify and explain **one** flaw or weakness in the reasoning in paragraph 3. [2]
- (c) By quoting the relevant words from the passage, identify
 (i) *an appeal to authority*. [1]
 (ii) *a counter-attack (tu quoque) flaw*. [1]
- (d) Evaluate the analogy in paragraph 6. [2]
- 5 *You are advised to spend some time planning your answer before you begin to write it.*
 'Humans should learn to cope without modern technology.'
- 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. [8]

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