



UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS  
General Certificate of Education  
Advanced Subsidiary Level and Advanced Level

**THINKING SKILLS**

**9694/23**

Paper 2 Critical Thinking

**October/November 2012**

**1 hour 45 minutes**

Additional Materials: Answer Booklet/Paper

**READ THESE INSTRUCTIONS FIRST**

If you have been given an Answer Booklet, follow the instructions on the front cover of the booklet.

Write your Centre number, candidate number and name on all the work you hand in.

Write in dark blue or black pen.

Do not use staples, paper clips, highlighters, glue or correction fluid.

**DO NOT WRITE IN ANY BARCODES.**

Answer **all** the questions.

Start each question on a new answer sheet.

At the end of the examination, fasten all your work securely together.

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

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



- 1 Study the evidence and answer the questions that follow.

**Source A****International News Report**

It is reported that Anton Aschenbach, one of the wealthiest people in Ruritania, has been arrested. Mr. Aschenbach made his fortune in the construction industry following the end of the civil war in the country. Amongst his many business interests, he is Chairman of the capital's top football club and head of an investment company. Ruritanian officials claim that the arrest is part of a crackdown on corruption. A police spokesman has announced that Mr. Aschenbach is being investigated on charges of bribery of public officials.

**Source B****Briefing Paper**

*from international monitoring organisation*

Government positions in Ruritania have traditionally been awarded on the basis of family connections rather than ability. Public officials who gain office through the influence of family or friends are expected to pay back their patrons with money collected through imposing taxes, fines, and service charges. Official corruption within the Ruritanian civil service is widely regarded as extensive. Civil service salaries are considered by many to be inadequate, and civil servants often claim they have no alternative but to supplement their income by accepting donations from members of the public. Ruritanian citizens report that without paying a substantial bribe, they cannot enter university, be admitted to hospital, have a telephone installed or obtain a passport or any other official document.

**Source C****Statement**

*from the exiled Ruritanian opposition party*

The state needs money. Reports we have received from within the country claim that the state treasury is empty and that this shortage of funds is forcing the authorities to find new means of generating revenue. One of these is to persuade the rich to pay huge sums of money as voluntary additional taxes by threatening them with legal action.

**Source D****Newspaper Report**

*from a special correspondent in Ruritania*

Rumours are going round the capital that the President's son, Bernard Bruges, is behind the arrest of Mr. Aschenbach. Bernard Bruges has for some time been furthering his own business interests in Ruritania, and eliminating any rivals who might prevent him from succeeding his father as President at the next election. According to one story, Bernard Bruges has been appointed to run Mr. Aschenbach's business interests while he is in prison.

- (a) Source B contains information about allegations of official corruption. How significant is this information in relation to the reasons for the arrest of Anton Aschenbach? [3]
- (b) How reliable is the information in Source C in relation to the reasons for the arrest of Anton Aschenbach? [3]
- (c) How useful is the information in Source D in relation to the reasons for the arrest of Anton Aschenbach? [3]
- (d) Why do you think Anton Aschenbach has been arrested? Write a short, reasoned argument to support your conclusion, with critical reference to the evidence provided and with consideration of any plausible alternative scenarios. [6]

## 2 Study the evidence and answer the questions that follow.

**Source A****Method**

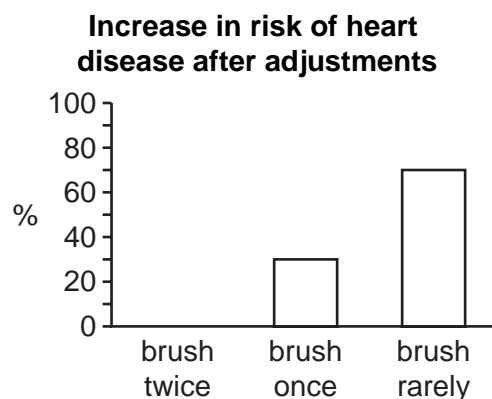
Researchers studied almost 12 000 men and women in Scotland. They asked them how often they brushed their teeth, and followed them up for eight years to see which of them developed heart disease. Their findings suggested a strong association between a lower frequency of tooth-brushing and an increased risk of heart disease. This risk was reduced, but was still significant, after adjusting for some important other factors, such as poverty, smoking, visits to the dentist, physical activity, obesity, diabetes and high blood pressure. Those who brushed their teeth less than once a day had generally less healthy lifestyles, so adjusting for these factors was important.

**Source B****Findings**

	<i>Rarely visit dentist</i>	<i>Overweight</i>	<i>High blood pressure</i>	<i>Heart disease</i>
<i>Brush teeth twice a day</i>	16.3%	18.9%	21.8%	3.6%
<i>Brush teeth once a day</i>	32.3%	27.3%	27.7%	6.6%
<i>Brush teeth rarely/never</i>	62.5%	33.8%	31.6%	10.9%

**Source C****Conclusion**

This study did not establish a cause-and-effect relationship between oral health and heart disease. However, even when adjustments are made for other contributory factors, there is a clear increase in the risk of developing heart disease for those people that brush their teeth only rarely or never.

**Source D****Press Release**

One in three adults in the UK do not brush their teeth for the recommended full two minutes, experts believe. The Chief Executive of the British Dental Health Foundation, Dr. Nigel Carter, said, "Your dentist can remove any build-up of plaque and tartar on your teeth, but everyday care is vital and is down to the individual. Your toothbrush is one of the best weapons against gum disease." He said many studies over the years had shown that the average time for brushing teeth is only around 45 seconds, less than half of that necessary to do a good job. "Yet our study shows people think they are doing considerably better than this," he said. "Gum disease is the largest cause of tooth loss in adults, and poor mouth health is being linked to more and more serious illnesses such as strokes and diabetes, but it is a preventable condition, and a good mouth health routine at home is key to preventing it."

- (a) One newspaper entitled its report of the research described in Source A, “Clean your teeth twice a day to prevent heart attacks”. How well does the research support this title? [3]
- (b) Suggest and briefly explain **two** reasons why the connection between tooth-brushing and heart disease may be **stronger** than suggested by the research described in Sources A, B and C. [3]
- (c) Does the information in Source D support **or** challenge the conclusion in Source C? Justify your answer. [3]
- (d) ‘Brushing your teeth twice a day is one of the simplest and most effective ways to improve your health.’  
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 – D. [6]

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

- 1 One of the most widely held convictions in modern Western society is that individuals are all entitled to their own opinions. Many people think they can say anything, however ill-considered, and if they are challenged reply, "Well, that's my opinion and I'm entitled to it." But if that opinion is wrong, or if they hold it for no good reason, then they are not entitled to it.
- 2 The claim to be entitled to one's opinion is a poor excuse for intellectual laziness. It should matter to us that our opinions are not misguided and when someone disagrees with us, we should want to explore the issue and find out who is right.
- 3 Even worse, the unsupported assertion of an opinion should be recognised as an attack on rationality. The alleged entitlement to one's own opinion apparently applies even if the opinion being expressed is immoral, offensive, contradicted by powerful evidence or nonsensical. Yet humans have rightly been defined as "beings of a rational nature". So if we voice an opinion without having thought about the issue, weighed the evidence and considered alternative views, we are being less than human.
- 4 Anyone who thinks that all opinions are equally acceptable is a fool. Some opinions are based on persuasive reasoning, whereas others are merely asserted. Some political opinions create huge social problems, whereas others promote prosperity and national unity. So of course they are not equally acceptable.
- 5 Admittedly, some judgments do vary between individuals, because of differing personal values. For example, in a particular situation one person may think it is important to tell the truth, whereas another may prefer to maintain smooth relationships by telling a "white lie". Some people like spicy food, whereas others don't. No one has the right to say that any of those preferences is right or wrong.
- 6 Other opinions, however, are matters of fact rather than taste, and in these cases it is possible for an opinion to be right or wrong. To take an extreme example, anyone who disagrees with the judgment that torturing babies is wrong is a moral imbecile, whose opinion does not deserve to be taken seriously. Anyone can prefer the music of The Beatles to that of J S Bach, if that is their taste, but if they go further, and claim that John Lennon was a greater musician than Bach, then they are simply wrong. No one is entitled to hold an opinion which is evidently wrong.

- (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** reasons used to support the main conclusion. [3]
- (c) Evaluate the reasoning in the argument. In your answer you should consider any strengths, weaknesses, flaws and unstated assumptions. [5]
- (d) 'No one should ever tell anyone else that their opinion is wrong.'  
Write your own argument to support **or** challenge this claim. The conclusion of your argument must be stated. [5]



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