



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

THINKING SKILLS

9694/21

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.

1 Study the evidence and answer the questions that follow.

#### Source A

# Background information

In the year 1876, Charles Bravo, a 30-year-old barrister, was living with his wife, Florence, and her companion (a kind of superior servant), Mrs Cox.

Before their marriage, Florence had been a wealthy widow, having inherited a fortune when her first husband died. She had had a relationship with Dr James Gully, who was much older than herself; his wife was a long-term patient in a mental hospital. He moved to live near Florence, but before she married Charles, she promised him that she would end her relationship with Dr Gully.

Charles Bravo was an unpleasant man, whose behaviour made him many enemies. He was unpopular with the servants and mean with money. Although Florence was recovering from a miscarriage, he insisted on sharing her bed again and was violent towards her when she asked him to sleep in his own room. Charles had had several arguments with Mrs Cox and had threatened to dismiss her.

Charles was in the habit of drinking a bottle of water in his room immediately before going to bed, but both Florence and Mrs Cox subsequently claimed to have been unaware of this practice.

Charles expressed concern that Florence was drinking too much. Less than two years after the events in this case, she died of alcoholic poisoning.

#### Source B

### **Newspaper report**

Suicide, Murder or Tragic Accident?

The death has occurred suddenly of Mr Charles Bravo, a young barrister for whom a glittering career had been predicted. Half an hour after Mr Bravo went to bed on 18 April, he was heard shouting for help. His wife's companion, Mrs Cox, found him vomiting and in great pain. He stated that he had taken medication to relieve toothache and may have accidentally taken too much. A doctor was called and stated that Mr Bravo had been poisoned. The doctor could not examine the patient's vomit, in order to discover what might have poisoned him, because Mrs Cox had cleaned it up. Mr Bravo died on 21 April 1876. Some people suggest that he committed suicide, but there are rumours that he may have been killed deliberately by a member of the household.

#### Source C

## Result of post mortem examination

Mr Charles Bravo died as a result of poisoning by tartar emetic.

# Verdict of inquiry into the death of Mr Charles Bravo

Mr Charles Delauney Turner Bravo did not commit suicide; he did not meet his death by accident; he was murdered by the administration of tartar emetic; but there is not sufficient evidence to fix the guilt upon any person or persons.

### Source D

### **Guide to Poisons**

Tartar emetic (potassium antimony tartrate) causes vomiting, burning irritation of the skin and perspiration. In the 19th century, small doses of tartar emetic were used as medicine to induce sleep or vomiting. Reports from the time claim that some women used to put very small doses in their husbands' food or drink to deter them from making sexual demands, and also that some people put small doses into wine in order to discourage heavy drinking. Tartar emetic is no longer used as a medicine, because of the severe risks posed by overdoses.

## Source E

#### **Television Series**

Julian Fellowes Investigates

In 2004, the actor and screenwriter Julian Fellowes wrote and presented a television programme on the death of Charles Bravo. He suggested that Charles may have had a supply of tartar emetic in his room because he was slowly poisoning his wife with it, in order to inherit her fortune. The bottle of tartar emetic may have looked like medicine. Fellowes thinks that Charles Bravo drank from the bottle of tartar emetic by mistake, and that his death was therefore accidental.

- (a) During the inquiry, it was revealed that Dr Gully had provided Florence with a bottle of medicine, in order to help her to sleep. The bottle was labelled "Poison".

  How significant is this additional information in deciding how Charles Bravo died?

  [3]
- (b) How useful is the TV programme (Source E) in deciding how Charles Bravo died? [3]
- (c) Recent research has revealed that Mrs Cox inherited a large estate from a relative shortly after these events.

  How significant is this additional information in deciding whether Mrs Cox murdered Charles Bravo?

  [3]
- (d) How do you think Charles Bravo died? 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

### **Tourist information**

Midges are tiny flying insects. A single midge is almost invisible to the human eye, measuring one millimetre in length with a wingspan of less than two millimetres. They are usually found in swarms. There are thousands of different species of midge around the world, but they are especially associated with Scotland.

Very few species of midge bite, and only a few of those feed on humans. The worst biter is the Highland Biting Midge. Even amongst those species of midge that do bite, it is only the females that do so. They need to feed on blood before laying their eggs.

Midges are mainly found between one and four metres from the ground, their numbers increasing with height.

#### Source B

### **Press Release**

Tall men and overweight women are most likely to get bitten by midges, new research has found.

This is the first time that researchers have found a link between body size and a person's attractiveness to midges. The study has found that hereditary factors make some humans more attractive to bloodsucking midges, and that women have a stronger reaction to the bites than men.

Scientists conducted a survey of more than 300 athletes and spectators at a race around the shores of Loch Ness, which is notorious for clouds of midges. Some people reported that they consistently got bitten more than others, while 14% of people said they never got bitten at all.

The head of the project said their research showed that tall men are bitten "significantly more than shorter men. We think that relates to the midge biology because midges like to rest in trees when they're not flying. They also like to fly at around two metres height so we think that tall men are just the first hosts they come across." She also said that larger women give off more skin 'volatiles' (chemicals which make up a person's scent) than smaller women and this made them more attractive to midges.

The aim of the project is to help in formulating a more effective midge repellent.

### Source C

## **Newspaper report**

The Sun, 31 May 2010

Scottish midges go for tall, sweaty, fat people, scientists say. The blood-sucking beasties generally fly 2.8 metres off the ground so attack lofty individuals – and burly people provide a bigger area to bite, the study found. That means big targets like Robbie Coltrane\* are worse off than pint-sized ones like Ronnie Corbett\*.

Heat and sweat also attract the pests. And women react more to their bites, a team revealed. They did their research at the 2007 First Monster Challenge relay race at Loch Ness. Scientist Dr James Logan said yesterday, "Quite a small percentage never got bitten. But we found your size does have an effect." He said women's reactions may be worse as they're more aware of their skin.

- \* Robbie Coltrane and Ronnie Corbett are well-known Scottish comedians and actors. Robbie Coltrane is overweight, while Ronnie Corbett is short.
- (a) In several areas of Scotland where midges are especially troublesome, there are no trees. To what extent does this contradict the claim in Source B that taller men are more likely to be bitten than shorter men?
- (b) Source C is taken from a report in a popular newspaper of the research described in Source B. How useful is this report? [3]
- (c) "Women's reactions may be worse as they are more aware of their skin" (Source C). How effective is this as an explanation for women reacting more to midge bites? [3]
- (d) 'This research project will help people to avoid painful midge bites.'
   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 C. [6]

- **3** Read the passage and answer the questions below.
- When television or radio programmes want a comment on a news item, they usually turn to an 'expert', but that term is very vague and problematic. Broadcasters and the public should be much more sceptical about opinions and evidence put forward by so-called experts. The American humourist Will Rogers defined an expert as "A man fifty miles from home with a briefcase", and there may be too much truth in that definition to be comfortable.
- There is no recognised qualification for being an expert. Describing yourself as an expert makes you one. So someone who is introduced as an expert on a particular issue especially if the issue is outside the mainstream of knowledge and research may not actually know much about it.
- 3 If an employer has paid someone to become an expert in a subject, then that person has a vested interest to select and present information in such a way as to benefit their employer. Anyone who believes in that information because it comes from an expert source is asking to be exploited.
- If no one has paid them, an expert probably supports a minority view, which gains more credence and publicity than it deserves, simply because it is stated by an expert. A healthy dose of scepticism towards such claims is to be heartily recommended. This is especially true of subjects like extra-terrestrial life, where people who do not believe in life on other planets do not bother to become experts. You can guarantee that an expert on life on other planets is at best eccentric, and more likely mentally unbalanced, because no one else would take the trouble to study the topic in exhaustive detail or suffer the embarrassment of being known as an expert on something which does not exist.
- Appeals to experts follow a principle of inertia. Broadcasters always find it quicker and easier to contact someone whose phone number they already know than to find anyone new. Once you have convinced someone that you are an expert in some specialised but unpopular field, you will tend to have it to yourself and your views will go unchallenged, no matter how bizarre they may be. So the experts whose opinions are presented on radio and television are usually people who simply like hearing the sound of their own voice.
  - (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) 'It is better to trust an amateur than an expert.'

    Write your own argument to support or challenge this claim. The conclusion of your argument must be stated.

    [5]

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Copyright Acknowledgements:

Question 2

 $\ \, \mathbb{O}\,$  Douglas Walker;  $\,$  Midges like tall, fat, sweaty folk; The Sun; 31 May 2010.

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