

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

THINKING SKILLS

8436/02

Paper 2 Critical Thinking

June 2005

2 hours

Additional Materials: Answer Sheet

READ THESE INSTRUCTIONS FIRST

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

There are **3** questions on this paper. Answer **all** the questions.

Write your answers on the separate answer paper provided.

Start each question on a new answer sheet.

If you use more than one sheet of paper, fasten the sheets together.

INFORMATION FOR CANDIDATES

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

This document consists of **5** printed pages and **3** blank pages.



1 Consider the following scenario, including the map; then answer the questions that follow.

Last Friday evening there was a fire at Park Road High School, which damaged a storeroom and two classrooms.

The Chief Fireman's comments were reported in the local newspaper on Saturday morning. He said that the fire appeared to have started in a pile of waste paper, that it must have started between 19.30 and 19.45, and that it was possible that it had been started deliberately. The waste paper was outside the storeroom under a projecting roof where students leave their bicycles during the day. The caretaker should have arranged for the paper to be collected on Friday afternoon.

There is a high wall around the school grounds, except for the boundary with Mrs Wong's garden, where there is a fence. The front gates are left unlocked, so that emergency services can have access, but CCTV and a security light protect the gates. The CCTV camera did not show anyone passing through these gates between 19.00 and 20.00 on Friday evening. The rear gates also have a security light, and should be locked by the caretaker when he leaves. After the fire on Friday evening, they were found to be unlocked. A notebook belonging to Tariq, a former student, was found in School Lane.

On Saturday afternoon the police interviewed a number of people. Mrs Wong, who lives next to the school in Bridge Road called the fire brigade at 20.12. She said: 'I called the Fire Station as soon as I saw the fire from my window. I can see the back of the storeroom from my garden, and sometimes I have seen students smoking there after school. But I wasn't in the garden on Friday evening.'

Ashok came forward and said that he and two other boys were playing football in the park, and that at 19.30, as they left through the gates into Park Road, they saw a group of boys walking along School Lane into Park Road. He said they looked as if they were trying not to be seen, and that one of them was Tariq. He added: 'Tariq really hates the school because he was expelled.' The two boys who were with Ashok confirmed seeing the group, but said that they did not see any of them clearly.

The Headmaster said two other schools in the area had been damaged by students who had been expelled. He said, 'Once one person does that, others will copy them. The only student we have expelled in the last year is Tariq.'

Tariq had been expelled from the High School for fighting on several occasions. On the most recent occasion, the caretaker had seen the fight and reported Tariq to the Headmaster. Tariq told police that on the evening of the fire he was talking to his friend Kareena (Ashok's sister) outside her house, which is 15 minutes' walk from the Park Road High School. He said that he was there from about 19.05, and left at 20.00. Asked about the notebook, he said that he had lost it some time ago, before he left the High School.

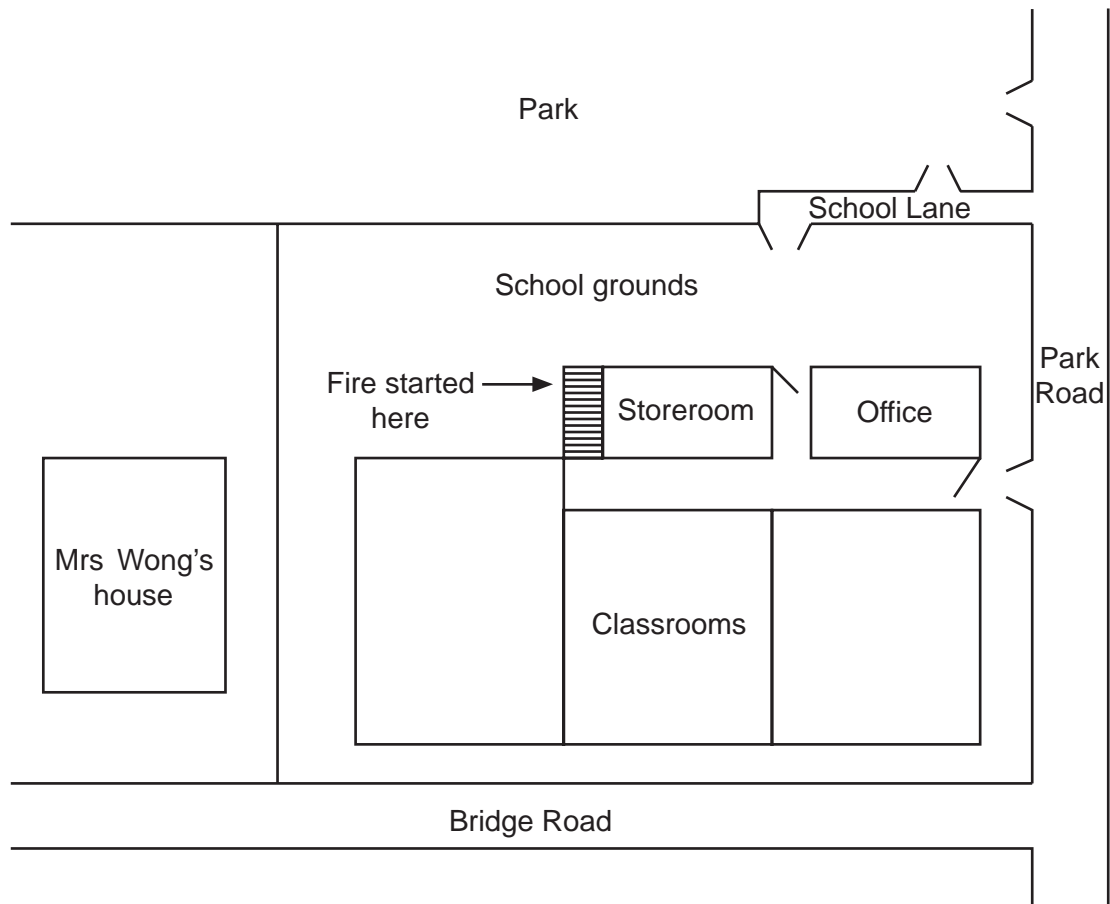
Kareena's mother said that Tariq was talking to her daughter for about an hour, but she hadn't noticed the time he left. She said he hadn't wanted to come indoors, probably because he didn't get on very well with Kareena's brothers. She said that they all disapproved of Kareena's friendship with Tariq, but that she herself liked Tariq, and didn't think he was a bad influence on her daughter.

Kareena confirmed that Tariq left at 20.00. Asked about Tariq's mood, she said: 'He doesn't like his new school, but he is always a very cheerful person.'

The caretaker said that he left the school at 19.00, and must have forgotten to lock the gates. He added, 'How did I know that someone with a grievance against the school was going to come in and start a fire?' Asked about Mrs Wong's comments, he said: 'She must be mistaken about boys

smoking there. I would know about it if they did. It's my duty to know what happens in the school grounds, and I always check whether anyone is there when I leave.'

The map shows the location of Park Road High School, and a plan of its ground floor.



Carefully evaluate the evidence above and make a judgement about how likely it is that Tariq deliberately started the fire at Park Road High School.

In your answer you should:

- consider the reliability of the various sources of information and evidence
- consider the credibility of the witness statements in the light of other information and evidence
- draw a sound conclusion based on your evaluation of the evidence.

[15]

Question 2 Read the passage below and answer the questions that follow.

Many of the food products we can buy are bad for our health; for example, sugary drinks that will rot children's teeth, and foods with a high fat content, which will cause illness and early deaths from heart attacks. Those who defend freedom of choice say that this isn't a problem, because what we eat is our own business, even if it makes us ill. But governments have to pick up the bill in increased costs for health care. Why should the taxes of those who eat sensibly be spent on this? It is unfair for anyone to have to contribute through taxation to solve a problem caused by the bad choices of other individuals.

It is also clear that total freedom of choice as to what we consume can leave us less free to control our own lives. The more choice there is, the more advertising there is, and advertising clearly works, otherwise manufacturers wouldn't spend so much money on it. It is most effective on those who are easiest to manipulate, and much of the advertising is specifically targeted at children. Thus it persuades children to demand unhealthy foods, and leaves parents helpless to resist the pressures.

So what's the solution? Because nobody likes the government to interfere in their lives, it wouldn't be popular for members of the government to appear on television telling people what they should and shouldn't eat. In any case, people are not so easily influenced by what is said on television, so they would ignore such messages, and make up their own minds.

Some governments have considered banning the advertising of unhealthy food to children. But in order to ban advertisements of such foods to children, it would be necessary to ban them altogether. Children watch television programmes that are not designed for them, they pass by billboards in the street, and they see promotions of certain foods in supermarkets.

So the government should ban the production and sale of unhealthy foods. Banning all advertising of these foods wouldn't solve the problem. It might ensure that children were not lured into unhealthy eating habits from which they would never escape; and it would stop the manipulation of adults, who are almost as susceptible as children to messages that appear on television. But even without adverts, there are some adults who cannot be relied upon to make the right choices.

- (a) Identify **three** reasons that the passage offers to support the conclusion that the production and sale of unhealthy foods should be banned. [3]
- (b) Identify **two** assumptions, not stated in the passage, which the author appears to make in relation to the statements made about children. [2]
- (c) The last sentence of the first paragraph is a general principle. Suggest another example of your own to which this principle applies. Give a reason why governments should, or should not, act on this principle. [2]
- (d) Identify **two** claims, one in paragraph 3 and one in paragraph 5, which contradict each other. [2]
- (e) 'The number of people who smoke has fallen dramatically since the showing of television programmes highlighting the health risks of smoking.' If this is true, does it strengthen or weaken the argument in the passage (or neither)? Give your reasons. [4]
- (f) (i) Assess the strength of the support offered for the claim that 'advertising clearly works'. [3]
(ii) What sort of evidence could provide additional support for this claim? [2]

Question 3 Write a critical evaluation of the argument presented below.

Your answer should show that you are clear about the structure of the argument, by summarising the main conclusion and the reasons given to support it, including any intermediate conclusions.

In your evaluation you should:

- **identify any unstated assumptions that the argument rests on**
- **point out strengths and/or weaknesses in the argument**
- **discuss any terms that need clarification**
- **comment on any special use of language in the argument.**

Finally include two further arguments for or against the conclusion.

The cameras that are becoming common on the roads of many countries can record the speeds of passing cars, and identify vehicles so that drivers can be traced. As a result there has been a dramatic increase in convictions of drivers for exceeding speed limits. Despite this apparent success, speed cameras should be dismantled and thrown away.

The penalty for being caught speeding is an automatic fine, so, since the cameras provide an easy source of income for the government, that is why they are used. Therefore it is clear that cameras are installed for the wrong reason.

The idea that cameras make roads safer depends on two false assumptions – that exceeding speed limits causes crashes and that enforcing speed limits will reduce road accidents and deaths. In fact in some countries road deaths have increased by up to 2% since these cameras were introduced. Speed cameras are placed on roads with high accident rates, but these accidents may be due to dangerous bends or poor road surfaces.

The cameras have two serious consequences. The fact that they are easily seen encourages drivers to stick to speed limits when they are close to a camera, and to break the law at other times. They also make drivers think that if they stick to a speed limit, they are driving safely. This isn't true. Poor drivers driving slowly crash at lower speeds, but they still crash.

Is there a physical law that makes 55 kilometres per hour safe and 60 kilometres deadly? Yes, one can stop more quickly if one is driving more slowly, provided the brakes and the tyres are good, and one's reactions are quick. But here we are adding conditions to what is supposed to be an absolute rule. Ensuring road safety is too complex a matter to be achieved by speed cameras.

What is needed to reduce road accidents and deaths is better education, better training and better testing for drivers, to ensure that those who are entitled to drive will perform at the highest standard. So obviously we don't need speed cameras.

[17]

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