

UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS
General Certificate of Education Advanced Level

THINKING SKILLS

8436/02

Paper 2 Critical Thinking

May/June 2004

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 plan of the school; then answer the questions that follow.

Nearly 700 Euros went missing from the secretary's office at the Precinct High School last Friday. The money was the week's income from the school shop, which the secretary was counting before taking it to the bank.

According to the secretary's statement, she had just finished counting the cash and was filling in the paying-in book when the phone rang. The caller was a man saying he was a neighbour phoning to report that there was a car alarm going off in the school car park. She said: "I put the money in the desk drawer and locked it. I went out, but when I got to the car park no one was in sight and there was no alarm either. It was very puzzling. I checked my car and the other cars nearby and went back. When I got to the office, I found that the drawer had been forced open and the money was gone." She could not recall what time it was.

A gardener had been working around the school that afternoon, cutting grass and trimming hedges. He said he saw two girls "walk across the grass and sneak into the school." He said he saw them again shortly afterwards in the secretary's office through the open window. Asked if he had gone inside the building that afternoon, he said: "No, I was working outside all the time."

Two students, Donna and Kristin, admitted they had been in the office. They were late for afternoon school (which starts at 13.00) and had found the office empty when they went there to sign the 'late book'. They had signed in giving the time as 13.20.

The students were interviewed separately and asked if they had noticed the desk drawer being open. Donna said that it might have been. Kristin hadn't noticed it at all. They were asked if they had seen anyone else on their way into school. Kristin said: "Yes, I think there was someone in the corridor." Donna was more definite. She said that as they came in through the front entrance there was a man at the end of the corridor. "It was dark inside after the bright sunlight," she said, "but I am pretty sure it was a man and he looked like he was wearing overalls."

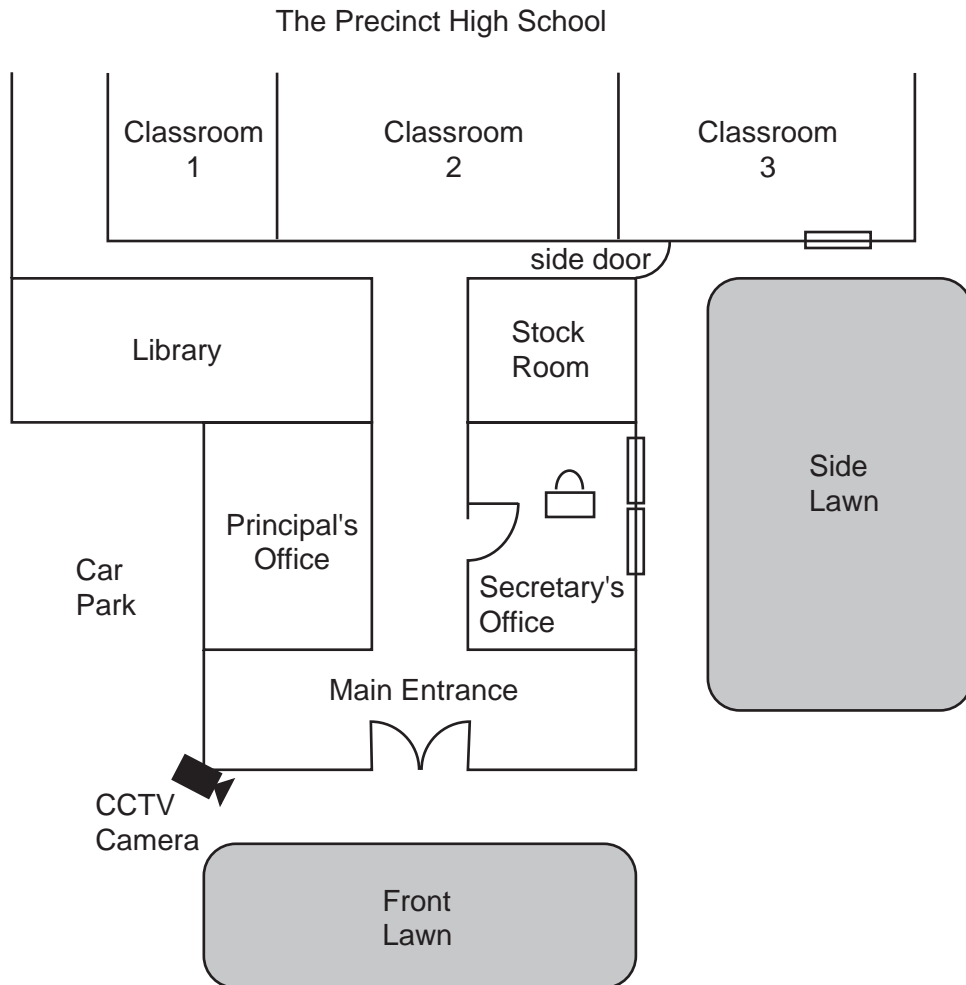
The Principal said that the two girls were friends in and out of school. He said: "They have been in trouble a few times over punctuality and other minor incidents, and I recently warned them that if they were more than half-an-hour late again I would write to their parents."

Mr Whalid, who was teaching in Classroom 3 at the time, could remember seeing the gardener working on the grass outside. He said that he had closed his window because of the noise of the machinery. Asked if it had gone on all through the lesson, he said: "No. Occasionally it would stop while he answered his phone or had a drink. Once when I looked out he wasn't there at all. I assumed he had stepped inside for a few minutes to cool off. You couldn't blame him. It was a very hot day and the building is air conditioned."

The telephone company supplied a record showing that the secretary received three calls between 13.00 and 13.30. One was from a mobile-phone number; it was logged at 13.26 and lasted 21 seconds.

A CCTV surveillance camera positioned above the front entrance shows the secretary leaving at 13.28 and returning six minutes later. It shows Donna and Kristin enter by the same door at 13.31. Half an hour earlier it shows the gardener cutting the front lawn. He is wearing blue overalls and ear protectors.

Police investigators found a few blades of freshly cut grass in the school corridor and on the floor of the office. They searched the secretary, the students and the gardener, but found nothing. Asked where his mobile phone was, the gardener denied owning one.



There are a few possible suspects: the secretary, the gardener and the two students.

Carefully evaluate the evidence given above and make out a reasoned case for charging one, or more, of the suspects with theft.

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]

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

In Britain many car crashes have occurred whilst police cars are pursuing stolen cars at high speed, resulting in deaths both of the car thieves and of innocent bystanders. The police should be banned from carrying out these car chases. If someone dies as a result of police activity and the fatal weapon is a gun, there is rightly a huge outcry. But if it is a car, that seems to be accepted as an unavoidable accident.

The police say that they are not putting the public at unnecessary risk, because their policy is to stop the chase when the speed becomes too high for safety. This merely emphasises the stupidity of carrying out the chases. Either the policy is adhered to, and the car thieves escape, or the policy is ignored, and injuries or deaths result. Not only is it obvious that this policy is ineffective - otherwise the crashes would not have happened - but it is also easy to understand why.

The police officers will find the chase exciting, since it is a break from routine, and gives them the chance to feel that they really are hunting criminals. Once the adrenaline is flowing, their judgment as to whether their speed is safe will become unreliable. Car chases can be huge fun for all the participants.

Moreover, those police officers who are trusted to undertake car chases are the most experienced drivers who have had special training in driving safely at high speed. The car thieves, however, are almost all young men with very little driving experience. By the time the police driver judges that his speed is unsafe, he will have pushed the pursued driver well beyond his limit of competence.

The police may say that if they were not allowed to chase car thieves, this would encourage more people to commit more of these crimes. Would it be so terrible if this did happen? Surely saving lives is more important than preventing thefts of cars, and the police would be more profitably employed trying to catch serious criminals, rather than bored and disadvantaged young men who steal cars for excitement. In any case, there are other ways of stopping stolen cars. For example, a certain device has been developed which can be thrown onto the road surface in front of the stolen car in order to bring it safely to a halt. And sometimes the chases are unsuccessful - the car thief succeeds in evading the police, abandons the car, and escapes.

- (a) Identify **three** reasons which the passage offers to support the conclusion that car chases should be banned. [3]
- (b) What **two** explanations does the passage offer as to why the policy mentioned in paragraph 2 is ineffective? [2]
- (c) Identify **two** assumptions which are not stated in the passage but which the author appears to be making in connection with the claims made in paragraph 2. [2]
- (d) "Some of those who steal cars are attempting to escape after committing serious crimes." Does the above statement, if true, strengthen or weaken the argument (or neither). Give your reasons. [3]
- (e) Identify **two** statements in the passage, one in paragraph 3 and one in paragraph 5, which, if true, cast doubt on the claim by police that banning car chases would lead to more car thefts. Explain why they cast doubt on this claim. [4]
- (f) An analogy is used in the first paragraph. What two things is it comparing, and does the analogy successfully support the argument? Explain why you think it does or does not support the argument. [4]

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 which need clarification**
- **comment on any special use of language in the argument.**

Finally include two further arguments for or against the conclusion.

There is no shortage of statistics available for those who like to tell us that fear of flying is irrational. For instance, it is a fact that the chance of being involved in a car accident is hundreds of times greater than the chance being involved in a plane crash. You only have to ride in a taxi from the centre of places like Cairo or Barcelona or Istanbul to the airport to experience for yourself how very dangerous it can be to travel quickly even with four wheels on the ground. Yet there are many people, perhaps as many as a fifth of the population, whose terror really begins when they get out of the taxi and on to the plane.

But what is irrational about that, I ask. Nothing. On the contrary, what is really irrational is the willingness of some people to sit calmly in their seats with nothing but 15,000 metres of fresh air underneath them.

Fear of flying is an entirely natural response to a completely unnatural activity, which no right-minded human being should even consider. The plain truth is that we humans are heavier than air. On solid ground we can stand and walk; in water we can float or swim. In air, we fall. And if we fall more than a few short metres, we break. We break and we can't be mended. Air travel, therefore, takes us into places we were never meant to go.

But that's not all. Aeroplanes are claustrophobic. People who describe air travel as 'flying' have got it all wrong. Flying is what birds do, freely and at will. Humans, when they want to take to the air, have to be packed and strapped into narrow metal tubes, with as much control over their destiny and as much chance of escape as sardines in a tin. No one with a shred of imagination or reason would submit to that.

And lastly there's the human factor. Planes are flown and navigated and controlled, not by super-beings, but by ordinary people like you and me. They get tired; they get bored, they get careless - just like you and me. And when that happens they make mistakes. A mistake at zero altitude is sometimes bad news. At 15,000 metres it is always bad news. And that, in my book, makes it rational to be more afraid, not less, when those wheels leave the runway.

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