



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

THINKING SKILLS

9694/02

Paper 2 Critical Thinking

June 2007

2 hours

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.

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 following evidence and answer the questions that follow.

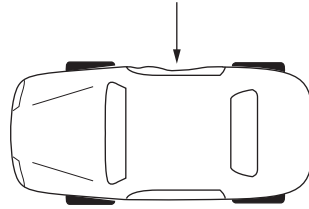
Carla Tay, an assistant at Tree Top School, has accused Dr H J Angelou, of 41 Bush Avenue, of causing **deliberate damage** to Carla's Toyota car on the afternoon of Thursday 14th December.

General information:

The car was parked outside number 41 as usual. (See map). There have been many complaints from local residents about the traffic problems caused by the school, and arguments with drivers bringing children to school.

Garage inspection report (extract)

There is a single deep dent in the right-hand (driver's side) door, but no other scratches or paint marks. It appears to have been struck in the direction of the arrow on the diagram.



Police Statements

Carla Tay (6.15pm 14 Dec.):

'At around 5pm Mrs Thomas, who was collecting her child from the school, announced that 'some fool' was outside trying to park their car and blocking all the traffic. My Toyota was parked over the road, so I went out to check. I was horrified to see it was badly damaged. The man at number 41 was in his driveway just getting out of his car.

I said to him: "Look at my car. It's got a big dent in the side."

He said: "What a shame. Perhaps it will teach you to park more carefully, in future."

I went back into the school and told Mrs Thomas that Dr Angelou had damaged my car.

She said: "Oh him! That doesn't surprise me. He probably did it on purpose. He's a horrible man!"

Dr Angelou (7pm 14 Dec.):

'I have no idea who could have damaged her car, but I'm not surprised or sorry. It's out there all day every day causing an obstruction. I asked her if she could park somewhere else.

She replied: "I pay my road tax and I'll park where I like."

The Smiths, next door, have had problems with her too.'

Professor Smith, 43 Bush Avenue (14 Dec.):

'I'm sure the damage had already been done when I walked up the hill, about 4.30pm. It was probably hit by a passing car that didn't stop. Or kicked by a cyclist. They get very annoyed at people who park in the bike lane. She's had arguments with Dr Angelou in the past. She said if she finds so much as a scratch on her car she'll know who to blame. Dr Angelou is a decent, professional man. He may get irritated, like we do, but he wouldn't do anything like that.'

Mrs Thomas, questioned the next day (15 Dec.):

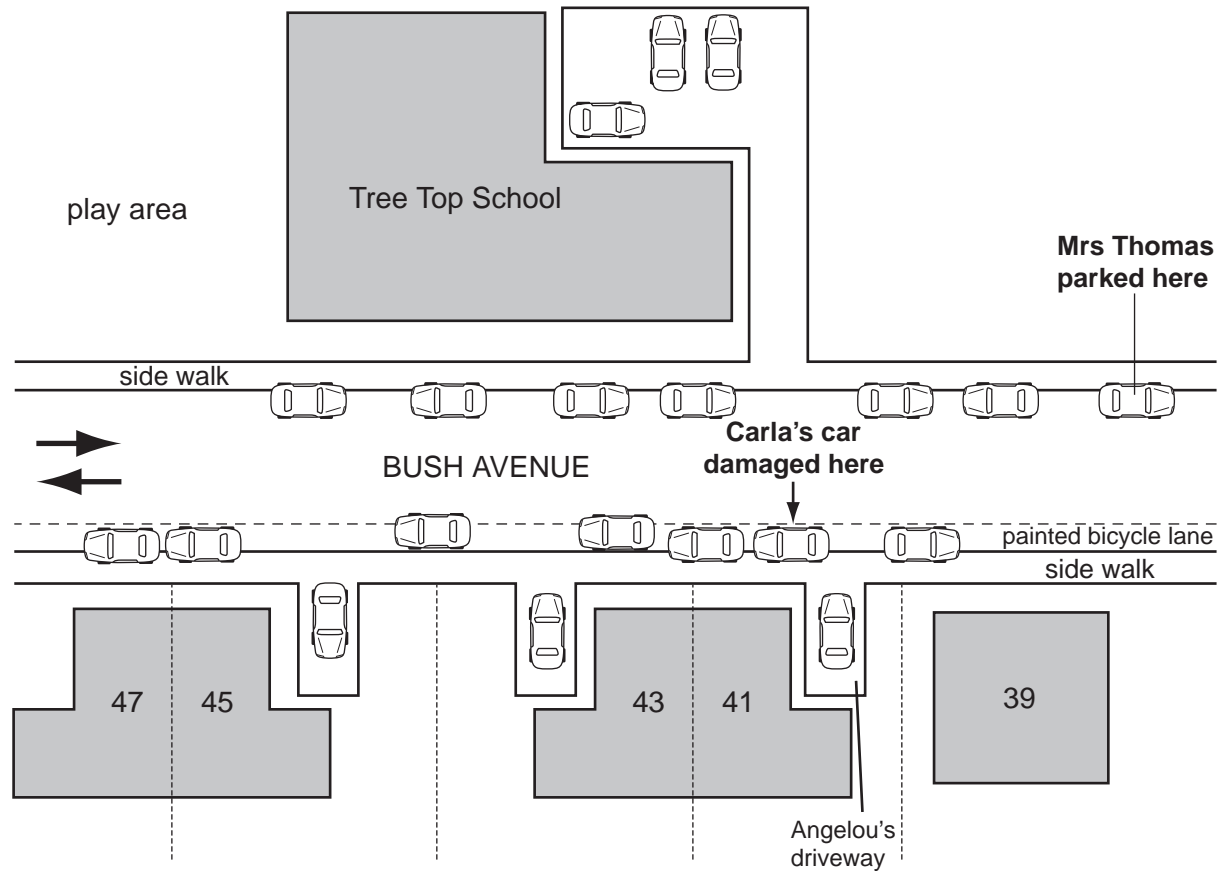
'I was parking here yesterday (see map) and I saw Angelou trying to back his car into his driveway. He was having difficulty and blocking the traffic. As I got to the school gate I saw him get out and give Carla's car a savage kick. I admit her car was in the way a bit, but that's no excuse. It didn't stop him getting into his driveway. And if it was such a big deal, all he had to do was go over and ask her to move it.'

Mrs Friel (parent of child in the school) (15 Dec.):

'Dr Angelou shouted at me once for blocking his drive, and I'd only left the car for a couple of minutes to fetch my daughter. He said if I did it again I'd be sorry.'

Diagram:

Map of Bush Avenue, showing parked cars just after the alleged incident. Reconstructed from witness statements:



- (a) What can be concluded from the position of Carla's car, and some of the other vehicles, as shown on the map? [2]
- (b) Evaluate the relevance and reliability of the evidence provided by Professor Smith, and compare it with the statement by Mrs Friel. [2]
- (c) Comment on the reliability of the statement by Mrs Thomas, taking into consideration Carla's statement. [4]
- (d) How likely is it that Dr Angelou deliberately damaged Carla Tay's car? Construct a short reasoned argument to support your conclusion. Use the evidence provided. [5]

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

More and more aspects of our lives are covered by insurance policies. We insure our houses, our cars, our health, our lives – we do this without question. Yet we ought to be using insurance policies as little as possible.

The only beneficiaries of the insurance system, economically, are the insurance brokers. People suffer from occasional disasters and mishaps and, without insurance, individuals would pay the costs themselves. But, if you buy insurance policies, you help to pay the cost of other people's mishaps, and at the same time an army of "middle-men" make a living out of it.

Reliance on insurance creates a vicious circle: as people become used to insuring their goods they naturally become more careless. People are more willing to leave their cars in dangerous areas of a city if they are insured against theft. As insurance becomes more accepted, more people do leave their expensive cars in inappropriate places, and thus more thefts occur. This in turn encourages more people to take out car insurance. What is needed is for people to be more careful and not just accept that mishaps will occur.

However there is still a feeling that insurance serves a purpose in smoothing over life's troubles. This is perhaps true, but it does not necessarily lead to contented lives, because the acceptance of insurance raises our expectations.

We see something similar in the public's attitude to the lateness of trains. In some countries the number of complaints about the lateness of trains has increased over the last 50 years, even though train services have improved. People expect trains to run perfectly on time. In the same way, people expect a life without financial loss. People's expectations have gone up. In the past they were willing to accept the cost of small mishaps but now they want to insure themselves against everything, however trivial. So what has been gained?

- (a) What is the author's main conclusion? [2]
- (b) Identify an unstated assumption in the second paragraph. [2]
- (c) Consider the chain of events which illustrate the vicious circle, described in the three middle sentences of paragraph three. State which of the steps in this reasoning you think is the least convincing and explain why. [2]
- (d) How effective is the analogy relating to trains in the last paragraph? [3]
- (e) Give **one** further argument which either supports or counters the conclusion of the above argument. [3]

3 Study this article and then answer the questions that follow.

In 2002 a corpse found near Las Vegas was identified by fingerprints as Nathaniel Harper, a person who happened to be alive and well. In 1991 an innocent man was convicted, on the basis of fingerprint evidence, of a rape to which another man later confessed. An American lawyer was arrested in connection with the Madrid bombings in 2004 because his fingerprint was supposedly found on a bag in the Spanish capital. After several weeks the fingerprint was matched to a man living in Spain.

Despite such evidence, fingerprint examiners* still say their technique is infallible**. Fingerprint matching is undoubtedly a valuable tool for catching criminals but it suffers from one major disadvantage: nobody knows how often the people who examine fingerprints are wrong. We should acknowledge that there is an error rate and find out what it is.

In science all errors should be understood and quantified, whether they come from the method used, the equipment or human error. The error rates of automated fingerprint recognition systems*** are well understood. From experiments with bank cards and car keys that work by using fingerprint recognition, we know that machines make mistakes and so we can't rely on them. We should be equally cautious about human fingerprint examiners.

Understanding the error rates in the way human experts match fingerprints in legal cases will create problems. Any criminal whose conviction relied heavily on fingerprint evidence is likely to appeal. But that is no reason to ignore the issue. Innocent people are being wrongly convicted.

Ignoring the existence of error also prevents fingerprint analysis being improved. Evidence indicates that fingerprint examiners' decisions are influenced by what they are told before they examine a potential match. Such biases will not be dealt with unless it is acknowledged that they exist.

As more mistakes are exposed and defence lawyers intensify their challenges, it is only a matter of time before judges and juries reject fingerprint evidence. That would be a dreadful waste of a powerful tool. Far better to do some research now so we know how confident we can be about fingerprints.

* Fingerprint examiners: people who examine fingerprints (often for legal cases).

** Infallible here means never giving the wrong identity.

*** Automated fingerprint recognition systems: machines and software which automatically match fingerprints.

(a) For each of the following, say whether or not it can be reliably concluded from the above passage. You **must** give a brief reason to support your answers.

(i) It is not safe to convict defendants on fingerprint evidence alone. [2]

(ii) Courts should accept scientific evidence only from methods with extremely low error rates. [2]

(b) Identify **two** reasons the author uses in the last three paragraphs, to support his conclusion. [2]

(c) How useful is the example of automated fingerprint recognition for the author's overall conclusion? [2]

(d) 'It would be better to imprison a few innocent people than give the guilty an easy way out of jail.' How effective is this statement as an objection to the argument? [4]

4 Critically evaluate the following argument. You should:

- (a) Show that you have a clear understanding of the argument by identifying its main conclusion and the reasons used to support it. [5]
- (b) Evaluate the argument by identifying any **unstated** assumptions and discussing any weaknesses and flaws. [5]
- (c) Offer **one** further argument which could be used in support of or against the main conclusion. [3]

The Olympic Games no longer celebrate physical greatness so the name of the games should be updated to reflect this change in purpose. We might call them, for example, 'The International Greed and Gloating Games.'

The Olympic Games now celebrate only the might of money. A few rich countries dominate the Olympic Games, winning most of the medals and the glory. Yet it is rich countries that have the worst problems with unfit, obese populations, so they cannot be winning so many medals through being the best at sport. Furthermore, it is impossible to succeed in the Olympic Games without sponsorship from a major international corporation. These are all based in rich countries, so people from poor countries do not have a chance to win medals at the Olympics.

Hosting the Olympic Games provides an opportunity for rich countries to show the rest of the world how big and important they are, by building huge, useless stadiums and monuments. These buildings divert scarce resources from projects such as hospitals or creating jobs for the urban poor. So the Olympic Games can be seen to encourage the senseless and shallow spending of the rich.

The Olympic Games are supposed to create friendship between citizens of different countries. However, people in each country support runners, gymnasts or boxers from their own country, and become more patriotic and proud. So they feel insulted when an athlete from another country beats their athlete, and this leads to misunderstanding, fights and violence. If it is not checked, this national competitiveness could lead to wars rather than friendship.

If the Olympic Games were really about celebrating human physical prowess, there would only be events like running which test the human body to its limits. However, all sorts of idiotic hobbies are included in the Olympic Games. They are even thinking about including darts and fishing as Olympic sports. You may as well have competitive reading events. The Olympics has clearly got nothing to do with sport any more.

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