

0645

## THINKING SKILLS

Paper 2 Critical Thinking

9694/02 November 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 and 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 8 printed pages.



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

Greta and Anil, both aged fifteen, claimed that the school bus went without them after a school trip. Forced to make their way home without money, they said they had accepted a lift with a stranger that 'could have ended in disaster'. Anil said the teachers had done it on purpose because they were 'fed up with us'.

Ms Nuñez, the more senior of the two teachers who had organised the trip, said that after the activities had been completed the whole group went to the Visitor Centre and were given some free time to look round the shop before leaving. They were told to be back at the bus by 4 o'clock.

An enquiry was held, presided over by the chairman of Graysville School governors (CHAIR). Witnesses were heard in turn. The following are extracts from the enquiry.

(Mr Eales, the second teacher)

CHAIR Mr Eales, did either of you count the students before leaving?

EALES Yes, I did. That was my job. I counted 34, starting at the front. There were 36 in the group.

CHAIR Where was Ms Nuñez?

EALES Still in the centre, maybe getting something in the shop. When she came out I told her we were two short. She said: 'I've seen them. It's all right. They're here now.' She told the driver to go.

(Ms Nuñez)

NUÑEZ Mr Eales went back to the bus. I went round the centre to round up any stragglers.

CHAIR Did you see Anil and Greta?

NUÑEZ Yes. Talking to some boys. I told them to hurry up or we'd leave them behind.

CHAIR Did you mean it?

NUÑEZ Of course not. It's something you say to hurry kids up. You know that, and they know that. It would have to be *those* two girls, wouldn't it!

CHAIR Did you see them get on the bus?

NUÑEZ I was sure they had got on. Anyway, Mr Eales counted them and said they were all there.

(Anil)

CHAIR Did you misbehave on the trip? You said your teacher was annoyed with you.

ANIL Maybe a bit. It doesn't take much to annoy Ms Nuñez.

CHAIR What did you do?

ANIL Nothing. Talked to some boys from another school. We were having a laugh, that's all. She saw us and said: 'You two, now! Back to the bus'. I said, 'It's only 3.45.' She pointed her finger at me and said: 'I've had about enough of you. Back to the bus or you can walk.' One of the boys said 'What's her problem?' and we all laughed. That made her even angrier but she couldn't say anything to them. (Simon, a student from Graysville School)

CHAIR Did you see Anil or Greta on the bus?

SIMON No, but I wasn't looking out for them. Me and Anil don't really talk any more.

CHAIR But you used to be... she used to be your girlfriend.

SIMON Yes, I liked her. She's gone wild though, especially when she's with Greta. They probably missed the bus on purpose and went into town to shop. Greta's always got lots of money.

(Anil's father)

CHAIR When did your daughter get home?

FATHER 9.30 in the evening. We were going frantic, as you can imagine. We phoned the school, phoned her friends. They had walked fifteen kilometres before a man stopped and offered them a lift. Anil doesn't accept lifts – we don't allow it. But they were so tired and it was getting dark. And they'd spent all their money on lunch and drinks. He said he'd take them home, but instead he drove to a bar somewhere, and said he was just going to see a friend for a few minutes. They didn't even recognise the area. They refused to go in with him – naturally. So they had another long walk. Anil came in and burst into tears.

CHAIR Didn't she have a mobile phone? Or Greta?

FATHER She said the battery was dead. I don't know about Greta's.

(Greta)

- GRETA He seemed nice when he stopped to give us a lift. He thought it was bad we had been left behind by our teachers. It was only when we said we didn't want to go anywhere with him he got nasty. He said we shouldn't have got in the car if that is how we felt. I got scared and we just got out and ran.
- CHAIR How did you know your way home?

GRETA We had to ask someone.

CHAIR Where were you then?

GRETA Oh, er...I forgot what the man said.

CHAIR Anil told me earlier that you asked a woman.

GRETA Maybe it was a woman. It was dark and I was tired. Anil asked, not me.

Once it was realised the girls were missing, the school Principal drove back to the Visitor Centre. He did not pass the girls on the way there or back. At 7.00 he alerted the police, and officers in the area were instructed to look out for two teenagers.

Police enquiries failed to discover who the stranger was who gave the girls a lift. Neither of them had noticed the registration number of the vehicle, but they both said it was blue and that it was a Peugeot. Neither could remember where the bar was that the man took them to. Enquiries revealed that no other schools had been to the Visitor Centre that day.

- (a) How credible is the evidence of Ms Nuñez? Support your view. [3]
- (b) Which teacher is more to blame for leaving the two girls behind? Support your view. [2]
- (c) Comment on the reliability and usefulness of the evidence given by Anil's father. [2]
- (d) How credible is the explanation given by Greta and Anil for their late arrival home? Evaluate the evidence in order to support your answer and consider alternative explanations. [6]

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

The new level of international policing needed to counter terrorism has raised the following question: should all countries require their citizens to carry identity (ID) cards? I think they should not.

One reason for this is that it is completely unworkable. To be workable a system of ID cards relies on the police being able to stop anyone at any time, demand to see their ID card and arrest them if they don't have it. But the number of people who may be without their ID cards for good reasons makes this utterly impractical – think how many times you may have left your wallet at home, picked up the wrong handbag on the way out of the house, or hurried out from work without your jacket to get a sandwich... the list of good reasons is endless.

There is no particular reason why the ID cards should help the police to find criminals or terrorists. Firstly, people will not announce that they are terrorists on their ID cards. Secondly, someone who is stopped by the police either will be allowed to go free if they are not listed on police records or will be held for investigation if they are listed. Therefore the system will fail to catch terrorists and will be unfair to everyone with a criminal record – are offenders to be labelled as criminals forever? Thirdly, forgery\* of ID cards will be inevitable. Groups with criminal contacts are both the most able to acquire forgeries and the most likely to be planning acts of terrorism.

Finally, people may believe there are really good reasons for introducing ID cards. However, once they are introduced, a government will have such detailed information about its population that it will be able to use it against political opponents and even 'unwanted members of society'. This will be the starting point for widespread abuse of human rights. ID cards give governments too much power over individuals. We need protection from tyrants as well as terrorists.

\*the act of making false documents or altering or imitating a document

(a)	Identify two	reasons	the	author	gives	to	support	the	claim	that	ID	cards	will	fail	to	identify
	terrorists.															[2]

- (b) Identify one unstated assumption in the second paragraph. [2]
- (c) 'The police keep a list of people who are suspected of planning terrorist acts'.

Would this statement, if true, weaken or strengthen the argument or neither? Support your answer.

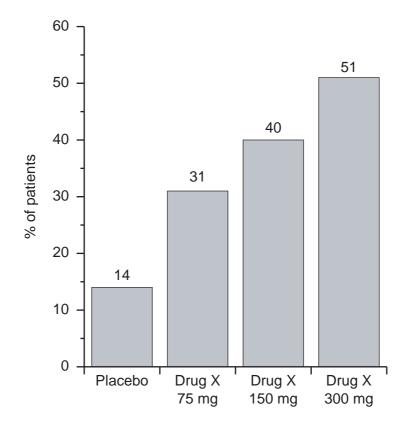
[2]

- (d) Identify and briefly explain **one** flaw in the author's reasoning in the last paragraph. [2]
- (e) Construct a brief further argument to either support or counter the claim that a country should require its citizens to carry ID cards. State your conclusion. [4]

**3** Study the following evidence and answer the questions that follow.

## Placebo

To test the effectiveness of new drugs or medications, such as painkillers, researchers usually perform tests on two groups of people. One group receives the new drug while the other group receives a placebo. A placebo contains no medication, but the patients do not know this. A placebo often has the same effect on patients as the real medication. The usual explanation for this is that the 'placebo effect' is entirely psychological.



# Figure 1: Patients with a >50% reduction in asthma symptoms after taking Drug X for 18 weeks

### Experiment A

Fourteen healthy males in their twenties volunteered to try a 'medication to relieve pain.' The researchers made the men feel pain. The volunteers were then given their 'medication' -a placebo of salt and water. All the volunteers reported feeling less pain than before.

The researchers scanned the volunteers' brains three times. They compared the levels of endorphins, the body's natural painkillers, produced in the men's brains. After the men took the placebo, their brains released more pain-relieving endorphins. So the 'placebo effect' is clearly physical.



"This is a placebo line. It's not a real profit but it makes us feel better."

### Low-level light therapy

The Patient

Hanna, a teacher from Cairo, has suffered from frequent migraines [very bad headaches] for many years.



#### The Treatment

Low-level light therapy works by concentrating a beam of cold light, from the red end of the spectrum, onto the skin, which is said to clear blocked channels in the body. This therapy is used to treat pain by making cells produce endorphins.

Hanna: "During a 45 minute appointment my therapist, Meera, focused the light laser onto my neck. She moved it slowly down, giving me three short bursts, lasting a few seconds."

#### The Verdict

Hanna: "After the session, I felt very relaxed and much more alive. My husband even said, 'Wow, you're in a good mood!"

Meera: "Hanna is full of energy. She also hasn't had her usual migraine, which shows the treatment is definitely working for Hanna."

- (a) Can either of the following be reliably concluded from the evidence above? Briefly explain your answers.
  - (i) Patients taking 300mg of Drug X experience a 20% greater improvement than those taking 75mg. [2]
  - (ii) Placebos work better for pain than for illnesses such as asthma. [2]
- (b) How might Experiment A be used to counter the idea in the cartoon, that a placebo has no real effect? [2]
- (c) '14 healthy male volunteers are not a representative sample of the whole population.' How effective is this objection to Experiment A? [3]
- (d) How well does the evidence support Meera's claim that low-level light therapy is 'definitely working for Hanna'? [4]

- 4 Critically evaluate the following argument. You should:
  - (a) Show that you have a clear understanding of the structure of the argument by identifying its main conclusion and the reasoning used to support it. [4]
  - (b) Evaluate the argument by identifying any **unstated** assumptions and considering weaknesses and flaws. [5]
  - (c) Offer one further argument which could be used to support or challenge the conclusion. [3]

'Teenage gun crime!' 'Nine-years old – addicted to drugs!' Headlines shout the bad news: young people are badly behaved and anti-social. And the message? Blame the parents. They are always out at work. They do not go to work. They do not discipline their children. They beat their children. They let their children watch TV all day. They put their children under too much pressure to achieve.

Contradictory rubbish! Parents are not completely responsible for their children's behaviour. Each and every one of us is an independent human being who can make their own choices, and this includes children. Some children from deprived homes or neglectful parents become determined to succeed and strive to do well in life. Others choose crime or anti-social behaviour despite coming from supportive backgrounds.

Zakia Ahmed, for example, comes from a good home in Islamabad – her father is a judge, and her mother a modest housewife. Yet Zakia was caught stealing in Harrods on a family trip to London. We cannot blame Zakia's parents for her actions.

Children are also influenced by their peers, by their teachers and by the media. These influences also contribute to the choices that children make. This means that they have to assume responsibility for their actions at a younger age than previous generations.

Anyway, our behaviour is determined by factors beyond our control. To start with, our genes dictate our behaviour to a great extent. For example, children with a short version of the MAOA gene are more likely to become criminal than other children, especially if they grow up in an abusive environment. Furthermore, we cannot go against our fate, we must follow our destiny.

So we can see that there are many reasons why children behave in an anti-social manner. These include also government policies which mean that young people do not see a future for themselves in the world their parents' generation have made. There are too few jobs, too much pressure to make money and too many big problems to feel guilty about, with no hope of finding a solution. And too many exams.

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