

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

**THINKING SKILLS**

**8436/02**

Paper 2 Critical Thinking

November 2006

**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.

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

## PARTYTIME STAR ACCUSED OF STEALING SONG

The superstar band, *Partytime*, and their lead singer Magnolia came under attack again yesterday when it was alleged that their number one hit, *If You Knew*, was originally written by an unknown school teacher who has never received a cent in recognition. The disclosure came soon after criticism that the band has cashed in big-time on their much publicised visits to African countries last year.

Now, if the latest accusations are true, the song isn't even hers to sing. It turns out that it was written ten years ago by Sarah Berry. Sarah had worked as a volunteer in Africa before training as a teacher. At her college she met Magnolia, then known as Maggie Coleman. 'The college did a charity concert, and we were both in it' Sarah recalls. 'I wrote a song for it, and Maggie sang it. I didn't think it was all that good, and never gave it another thought afterwards. It was only when I heard *If You Knew* that I recognised Maggie – and my song'.

Magnolia hotly refutes the claim. 'I don't even remember anyone called Sarah Berry' she says. 'I wrote *If You Knew* because I was fed up hearing rich people whinging\* when there's real hardship and suffering in

the world, like we saw in Africa. Whoever she is, she's just trying to get money. If she's got any proof she ought to produce it – or otherwise shut up'.

Partytime's lead guitarist Paco added: 'I was around when Magnolia was writing it. It came straight from her heart after the tour. We write all our own songs. People are always accusing stars of plagiarising\*\* – you know, stealing their songs – once they're famous. Berry is not the first and won't be the last'.

I visited Sarah in her rented one-room apartment. She dug out an old photograph album and scrap book. In it was a picture of a very young Magnolia singing in a student band. There was also a handwritten song with a simple sequence of guitar chords, but no tune. The chorus runs:

'If you'd been to the places I've been / And seen the things that I've seen / You wouldn't be sighing that life is so trying...'

On her latest tour Magnolia sings the chorus of *If You Knew* in front of a big screen showing disturbing images of poverty. Her chorus goes: 'If you knew the things that he's seen / Been to the places she's been / You'd have

less to say in your self-centred way...'

When I confronted her with this evidence, Magnolia said: 'OK. Maybe this woman did stand on the stage with me once when we were at college. Maybe we sang a song together and some bits of it stuck in my mind. That doesn't mean she wrote it, whatever she pasted in her scrap book. It's so long ago I just don't remember. As for the tune, that was all mine, and that's what really counts'.

I next visited Professor Jon Rudenko, who has been called as an expert witness in many high-profile plagiarism disputes. He told me the guitar chords in Sarah's scrap book would fit the tune of *If You Knew*. He added that it would not be impossible for the same chords to fit two different tunes, but it would be fairly unlikely that two tunes would have these same chords by chance.

The outcome is not yet clear, but whatever the verdict, it threatens Magnolia's already damaged reputation.

Jan Ewbank  
Arts and media correspondent

\* complaining

\*\* taking someone's words or ideas as if they were your own

**Follow-up:**

Rio Haynes, 17, who was a pupil in Sarah's class when he was 9, contacted Jan Ewbank's newspaper by e-mail to say that he remembered learning 'a song very like *If You Knew* to sing in a school concert'. He didn't know until he read Jan Ewbank's article that his teacher had written the song herself.

**From Sarah's Scrap Book:**

Maggie Coleman and me  
performing my "Africa" song.

- (a) (i) What evidence is there that Magnolia and Sarah once knew each other? [1]  
 (ii) Comment briefly on the reliability of this evidence. [1]
- (b) Give **two** possible explanations, other than pure coincidence, of the similarity between the chorus written in Sarah's scrap book and the chorus of *If You Knew*. [2]
- (c) How reliable is the evidence provided by:  
 (i) the lead guitarist? [2]  
 (ii) the former pupil's e-mail to the newspaper? [2]
- (d) Give a general assessment of the reliability of Jan Ewbank's newspaper article as evidence in the dispute. Use the information in it to give and justify your own verdict on whether Magnolia deliberately copied Sarah's song. [5]

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

There is clearly a place for the wearing of uniforms – the police, chefs, and judges all need uniforms. But none of the reasons which justify these apply to the wearing of school uniforms. School uniforms are a relic of an old-fashioned authoritarian school system.

One of the main reasons that is publicly given by schools for enforcing uniforms is that the school has a duty to protect its students. In the modern age of increasing violence it is argued that, by allowing intruders to be easily identified, school uniforms form a vital defence against any unauthorised person entering school premises. This is ridiculous. No serious criminal will be put off by such difficulties in evading detection.

The real reason why schools retain school uniforms is that it gives teachers an easy excuse to discipline disruptive students when they cannot prove they have committed more serious offences. This is unjust and it doesn't solve the real problem of bad behaviour.

And what is gained by having a uniform? Nothing. Students are distanced from the teachers that they should be identifying with; they are being taught by example that we should judge people by their appearance; and they are being isolated from the real world. Nor does it teach them to dress and behave appropriately when they leave school. They still wear outlandish clothes and revolt against the symbols of authority.

Schools should aim to let students' minds develop – this requires discipline of thought, and freedom of the imagination. Allowing students to wear their own clothes has no effect on the former, and is an expression of the latter. Schools should focus on discipline of the mind (not of the clothes). Students should be allowed to wear what they want.

- (a) (i) Summarise the argument for school uniform in paragraph two. [2]
- (ii) What reason is given for dismissing this argument? [1]
- (b) Identify **two unstated** assumptions which the author makes in paragraph four. [2]
- (c) Give **two** reasons of your own which might justify the uniforms of the police, chefs and judges but not apply to school uniforms. [2]
- (d) In the last paragraph, the author claims that schools should aim to let students' minds develop. Suggest an alternative aim of education which is consistent with schools enforcing uniforms. [1]
- (e) Give a further argument which either supports or contradicts the conclusion. Your argument should contain two reasons (and a conclusion). [4]

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

When unwanted email first came along, people invented different words for it, such as 'unsolicited email' and 'junk email'. But eventually 'spam' became the accepted word.

It's a process that happens, without a central decision maker, each time a new thing needs a name, but language researchers have struggled to explain how. Now a computer model shows the process at work – and may help us understand how the first human languages developed.

Luc Steels of the Sony Computer Science Laboratory and his colleagues studied the 'naming game,' a simple computer model that reflects how people invent words and use them. In the game, a group of 'agents' live in a virtual environment with a number of 'objects'. Each agent makes up random names for the objects and the agents then interact in pairs, trying to talk about those objects.

In each interaction, one agent, the 'speaker', says its word for an object, while the second agent, the 'hearer', listens. If the 'hearer' hasn't heard the word before, it adds it to its memory as a possible name for the object. But if the 'hearer' recognises the word, both agents retain this word in memory and discard any others for that object.

Repeated over and over again, this process reflects how people invent and share new words for objects; they constantly invent new words, yet can only use ones that others understand, so the process limits the number of words in use.

In the model, each object always ends up being described by just one word. 'The model is as simple as possible' says Steels. 'But it captures how a population develops an efficient communication system'. Nothing more is needed. A similar process could have helped human languages develop in the first place.

Steels and colleagues hope to develop more complex models, but they already see potential applications in computing. For instance it may soon be possible to get computers to talk to one another by letting them evolve a common language of their own.

- (a) Does this passage offer an argument, an explanation or neither? Give a brief reason to support your answer. [2]
- (b) Which of the following, if either, shows a way in which the computer model does **not** reflect how language develops. Give a brief reason to support your answer.
- (i) Names for new gadgets are often decided by their manufacturers. [2]
- (ii) People might not understand a language developed by computers. [2]
- (c) Is spam a good example of the way in which the model works? Justify your answer. [3]
- (d) A student objects that: 'This model doesn't explain the role of grammar in language'.
- (i) Is this a good objection to the model? Why? [2]
- (ii) Suggest **one** further objection to this model of language. [1]

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 reasoning used to support it. [6]
- (b) Evaluate the argument by identifying any **unstated** assumptions and discussing any weaknesses and flaws. [6]
- (c) Offer **two** further arguments which could be used in support of the argument, or against the argument. [4]

Metal detecting involves the use of an inexpensive hand-held machine to find metal objects in the ground. Amongst the archaeological community, there is an increasing anxiety about metal detector enthusiasts looting sites of archaeological significance, and selling the finds illegally. Despite being illegal, this practice is on the increase.

However, most sites that these enthusiasts cover do not yield the valuable and rare finds that archaeologists claim. The most common finds are singular coins, which, on their own, do not add significantly to the sum of archaeological knowledge. So, it is of no consequence for such objects to be kept by the finder.

The artefacts that they unearth are part of a community's history. The site at which such artefacts are discovered may belong to someone, but land ownership does not extend down through the layers of earth. The fact that a site of archaeological interest happens to lie on private property does not mean that the landowner possesses that site of archaeological interest. Thus the landowner can claim no rights to what is discovered there.

Once a site has been explored and rigorously recorded, it is often covered over for preservation. Also, when archaeologists discover artefacts, the objects are consigned to the storage vaults of a museum, where nobody gets to see them. Only a tiny proportion of archaeological finds actually make it to museum display cabinets. It is far better that someone really takes pleasure from the artefact rather than hiding it in a vault.

If valuable artefacts end up being sold to private clients, this is no different from works of art ending up in private collections. It is up to the private collector to offer the work of art for public exhibition, just as it is the decision of the owner of archaeological artefacts whether to share these treasures with the public.

Often, these amateur enthusiasts can inform professional archaeologists of the location of a site that might be of interest for excavations. Without this information, many potential sites would go undiscovered and unrecorded. Therefore, the owners of metal detectors should not be prevented from pursuing their hobby.



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*Copyright Acknowledgements:*

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Question 3 Mark Buchanan; New Scientist, 15 October 2005.

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