



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

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**THINKING SKILLS**

**9694/02**

Paper 2 Critical Thinking

**May/June 2009**

**1 hour 30 minutes**

Additional Materials: Answer Booklet/Paper

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**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.

**DO NOT WRITE IN ANY BARCODES.**

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.

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This document consists of **6** printed pages and **2** blank pages.



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

**Contract**

Agreement that Builders, BMS, should remove existing roof tiles, inspect and make good existing roofing timbers and provide and fit new roof tiles to detached dwelling, 87 Hind Street.

Work to be completed during the period 14 – 29 June 2008.

Signed on behalf of BMS:

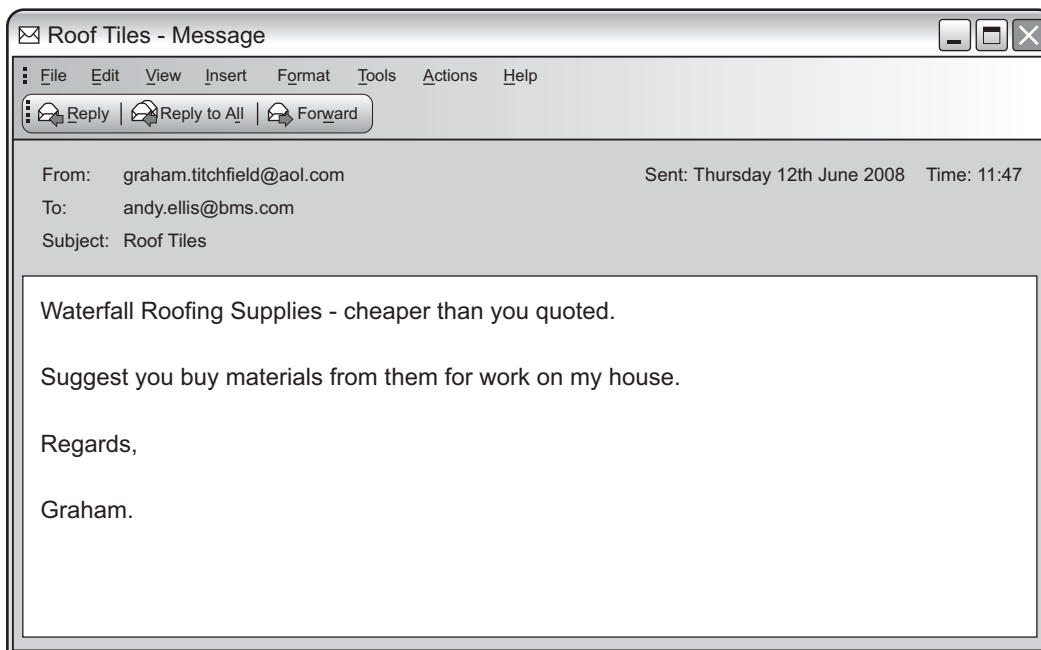


Andrew Ellis

Signed by client:



Graham Titchfield



**Box A**

Evidence given by Mr Titchfield to his lawyer:

BMS turned up one week late, on 21 June. Three men took the old roof off and made a good deal of mess. Then they disappeared. Two days later, two men turned up and sat in the van all day. The following day, they removed the roof timbers, which was not part of the agreed work and put plastic sheeting over the roof. They demanded more money. No one has appeared since then. We cannot live in our house. There seems no prospect of being able to do so in the near future. The whole situation is a nightmare. I do not feel that I should pay them any money. In fact, I want compensation.

**Box B**

Evidence given by Mr Ellis to the BMS lawyers:

I wish I'd never taken that job. Mr Titchfield? Argued about everything. Then emailed me two days before the job was due to begin saying he'd found a better supplier. I was concerned as I have had difficult dealings with Waterfall before. I phoned him and he got cross and accused me of trying to cheat him. He said he would order the tiles and we should start work one week later than scheduled to give him time. That caused us some problems with other jobs.

I sent reliable men. When they had taken the roof off, they found that the timbers were rotten and needed to be completely replaced. We informed Mr Titchfield of this and of the increase in price. He shouted at me and insulted me and ordered me off his property. I need half of the money agreed. I need to pay the men.

**Box C**

Derek Hengst, Roofer, speaking at the tribunal\* on September 18.

The roof timbers wouldn't have held up a new roof. We made the house watertight, as best we could. I heard shouting the last day we were there. Mr Ellis doesn't normally shout. He's calm. Never had any problems before with jobs he's sorted out. He knows what he's doing. I've been working for him twenty years.

**Box D**

Ka Yan Law, of 86 Hind Street, speaking at the tribunal on September 18.

It was a very disruptive time. Banging and crashing and dreadful loud music and workmen grunting and yelling at each other. They seemed very unmotivated to actually do any work. On the 23 June, I remember because it was my son Liang Jin's birthday, I heard terrible shouting coming from the house. I don't think it can have been Graham. People round here don't shout. It's not that sort of area.

\* tribunal: place of judgement or decision, often used when there is a dispute about employment or payment.

- (a) How relevant is the email from Graham Titchfield to Andrew Ellis? [2]
- (b) Whose evidence is more reliable, Derek Hengst's or Ka Yan Law's? Justify your answer. [5]
- (c) What is the significance of Liang Jin's birthday (see Box D)? [3]
- (d) Whose story is more likely to be true, Titchfield's or Ellis's? Write a short, reasoned argument to support your conclusion, using the evidence provided and considering the plausibility of the alternative scenarios. [5]

2 Study this evidence and then answer the questions that follow.

**Document A**

The most common food additives are preservatives, antioxidants, sweeteners and colourants. All approved additives have been subject to scientific testing to establish whether they represent a hazard to health and to ensure that their use shall not be a health risk, conceal poor food quality or deceive the consumer. Soft drinks, especially sugar-free beverages, sweets (except chocolate) and dried packet sauces, soups and casseroles usually contain considerable amounts of additives. 'Natural food' is simply a collection of chemicals; food scientists imitate, manipulate and use chemicals, like those in natural food.

**Document B**

A 2 year-old girl from Victoria, Australia, was rushed to the emergency room with a dramatic all-over itchy skin rash and facial swelling. She had eaten instant noodles with additive 635.

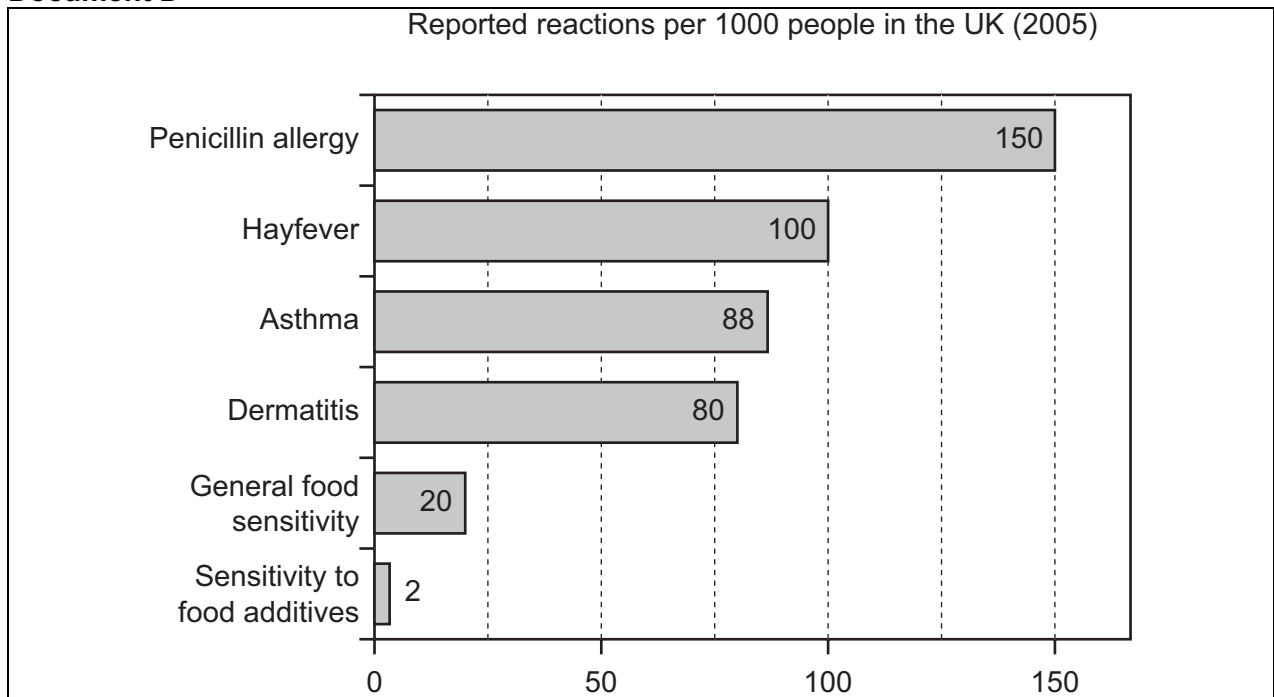
**Document C**

A trial at the University of Southampton in 2007 examined the effects of common additives on 153 3-year-olds and 144 8 to 9-year-olds. Some of the children were given a placebo<sup>1</sup>. The children's behaviour was rated by teachers and parents, plus a computerised test for the 8 to 9-year-olds. When given Mix A, a drink containing an amount of additives roughly equal to that found in two bags of sweets, children from both age groups showed significantly increased hyperactivity<sup>2</sup>, compared to results for the placebo.

<sup>1</sup> 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.

<sup>2</sup> Hyperactivity – Behaviour characterised by over activity.

**Document D**



**Document E**

So long as they are fully tested, there is no excuse for the puritanical\* attitude that adding colours to food is wrong. Why did we add colour to the television, the newspapers and to our computers? Colour is one of the greatest life enhancers we have. The challenge for chemists is to devise colours that are safe to use in food.

Food Additives and Ingredients Association

\*Puritanical: believing that pleasure is wrong or unnecessary.

- (a) 'Additive 635 caused the girl's reaction.'  
Can this reliably be concluded from Document B? Briefly explain your answer. [2]
- (b) The scientists in Document C conclude that additives generally make children more hyperactive. Document D says that only 2/1000 people are sensitive to additives.  
Is this a contradiction? Explain your answer. [4]
- (c) 'Why did we add colour to the television, the newspapers and to our computers?' (Document E).  
Is this an effective comparison with adding colour to food? Justify your answer. [3]
- (d) Is there enough reason to believe that adding colours to food is wrong? Write a short, reasoned case to support your conclusions, using and evaluating the information provided in Documents A-E. [6]

**3** *Read the passage and answer the questions that follow.*

- 1 There is pressure on young couples to have babies. But young people, especially educated women, are increasingly choosing not to have children, or to have fewer of them. Many may call such people selfish. But having children is actually the selfish option. Ensuring the survival of your own genes is entirely for your own benefit. Producing children just so that they can wipe your dribble and listen to you moaning when you are old and infirm is hardly an altruistic act.
- 2 Who knows how many parents and children make each other miserable on this Earth? Many parents mistreat their children because they entered the parent-child relationship rashly and are not ready for the responsibility of a child. Others try to live their own lives through their children and push their young to achieve all the things they did not. It is unfair to the children to have such demands placed on them. Such parents would have been better thinking through the decision to reproduce.
- 3 Children are hugely expensive consumers. They need food, clothing, medical care, trendy gadgets, football equipment, dancing lessons, cars... This can be a problem for parents. More importantly, the Earth will struggle to cope. Unless we have fewer children, the world will get more and more crowded. For every child born, more of the world's precious resources will be used up on a wasteful, unnecessary lifestyle. So making the decision not to have children is actually unselfish.
- 4 People speak of the joy of having children – and there undoubtedly is a kind of biological reward that makes even intelligent people go gooey when their baby gurgles at them. But this cannot compensate for all the sacrifices a parent must make. Children take over your life and eclipse your identity. Your friends don't want to know you anymore, you can't go out, you can't have an adult conversation... Your kids demand constant service and attention to their needs, as if you were a maidservant, but can't manage to be polite to you. And they last for more than twenty years. The decision not to have children is clearly a reasonable one.
  - (a) Show that you understand the structure of the argument. You should identify the main conclusion and the reasoning given to support it. [5]
  - (b) Evaluate the reasoning. You should identify any assumptions, flaws and weaknesses and assess their effect on the strength of the reasoning. [5]
  - (c) 'Children have the right to demand what they want from their parents'. Write your own argument to support or challenge this claim. [5]

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*Copyright Acknowledgements:*

Document A	<a href="http://www.fedupwithfoodadditives.info/factsheets/635/RIBO1.htm">http://www.fedupwithfoodadditives.info/factsheets/635/RIBO1.htm</a>
Document B	<a href="http://www.fedupwithfoodadditives.info/factsheets/635/RIBO1.htm">http://www.fedupwithfoodadditives.info/factsheets/635/RIBO1.htm</a>
Document C	<a href="http://www.onmedica.net/content.asp?c=40608&amp;t=1">http://www.onmedica.net/content.asp?c=40608&amp;t=1</a> OnMedica Group Ltd
Document D	<a href="http://www.understandingfoodadditives.org/pages/Ch5p2-2.htm">http://www.understandingfoodadditives.org/pages/Ch5p2-2.htm</a> Chemical Industries Education Centre, University of York
Document E	<a href="http://www.faia.org.uk">http://www.faia.org.uk</a>

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