



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

THINKING SKILLS

9694/22

Paper 2 Critical Thinking

May/June 2013

1 hour 45 minutes

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.

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.

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



- 1 Study the evidence below and answer the questions that follow.

Source A

Extract

from C J Mole and Co. Policy Statement

Here at C J Mole we pride ourselves on the fact that our senior employees are responsible and trustworthy. We understand that the impression we want them to give our clients will require standards of dress that may be more expensive than they would wish. Therefore, we allow all reasonable expenses claims for clothes bought for use in a business context. Equally, we realise that when entertaining clients, it would be unwise to make false economies by taking them to cheap restaurants.

Source B

Statement

from retired C J Mole employee

They certainly looked after us at C J Mole and provided a number of free services such as a canteen and a generous pension scheme. However, they discouraged people from joining a trade union and salaries were a bit lower than the average. It was quite a common practice for those with expenses accounts to fiddle them so that the company paid for personal expenditure. I think the company tended to ignore this.

Source C

Expenses claim

for one month from James Rickenbacker

4 shirts	\$150
1 suit	\$600
Dinner for 5 people	\$250
Fuel	\$200

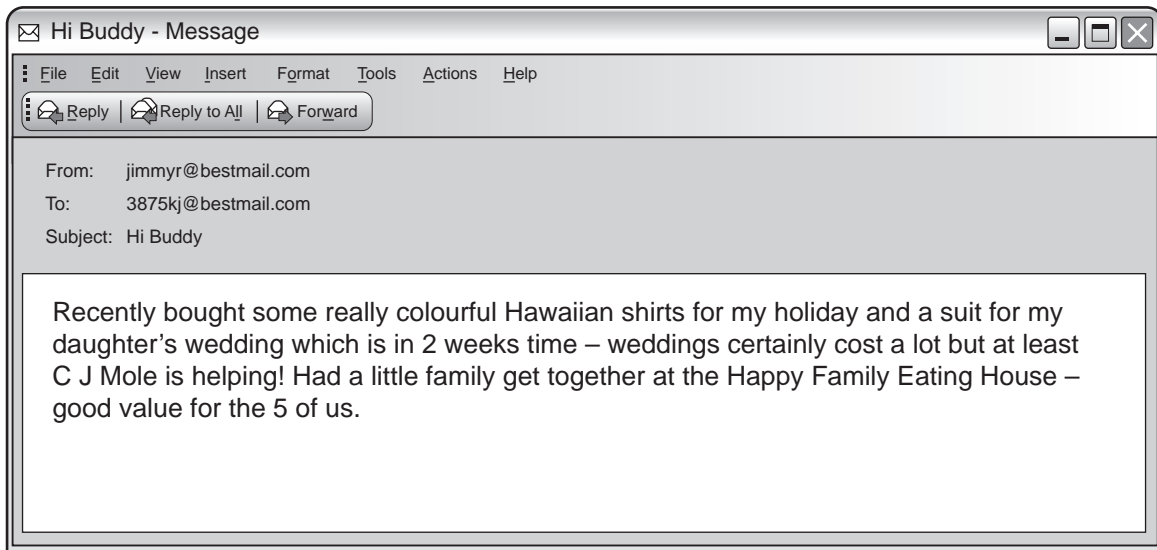
Source D

Extract

from James Rickenbacker's bank statement

Tropicana Leisure Wear	\$150
Suits R Us	\$600
Happy Family Eating House	\$100
Main St Filling Station	\$200

Source E



- (a) How reliable is the evidence given by the retired employee in Source B? [3]
- (b) How useful is the evidence about spending in Tropicana Leisure Wear in Source D in deciding if Rickenbacker is fiddling his expenses? [3]
- (c) How significant is Rickenbacker's comment in Source E that "at least C J Mole is helping"? [3]
- (d) How likely is it that Rickenbacker has been making false claims on his expenses? Write a short, reasoned argument to support your conclusion, with critical reference to the evidence provided and considering plausible alternative scenarios. [6]

2 Study the evidence and answer the questions that follow.

Source A

Government pamphlet

on using speed limits to relieve motorway congestion

You may have noticed when driving on a motorway that the traffic suddenly slows down or even comes to a halt for no apparent reason. Expert analysis has suggested that this is due to driver over-reaction to actions by other drivers (e.g. lane changes) when travelling at maximum speed. Drivers respond by braking more sharply than necessary, as does the driver of the car behind, meaning there is a gradual accumulation of excessive braking. This eventually leads to the traffic slowing down or coming to a halt. The solution to this is the use of variable speed limits. Variable speed limits keep traffic moving by controlling the flow of vehicles when the route is congested. A computer system is used to calculate the most appropriate speed limit based on the volume of traffic and overhead signs indicate this to motorists.

Source B

Expert analysis

of the use of variable speed limits

Using variable speed limits to slow the fastest vehicles can avoid flow breakdown and so reduce the journey time for most vehicles, provided that it is done when the conditions are appropriate. For instance, it does not work particularly well on roads with steep gradients. Reducing the speed limit means that vehicles can travel closer together safely and closer spacing of vehicles leads to reduced opportunities for lane changing. However, the situation is more complicated when drivers face a heavy volume of vehicles trying to join the motorway. In such cases, variable speed limits have less impact and can even make the situation worse.

Source C

Environmental protection group pamphlet

Traffic flow is difficult to predict. It is influenced by a multitude of factors, including the behaviour of individual drivers. This makes management of the traffic flow an uncertain business. It is impossible to predict the traffic volume, as drivers' destinations are unknown and their plans may change depending on the road situation.

The overhead signs needed every 800 metres to display the variable speed limit can be very visually intrusive in sensitive landscapes. Lighting is needed along these sections of road for safety reasons and this significantly increases light pollution. A better solution would be to have a permanently lower speed limit on sections of motorway prone to congestion. There would also be a fuel efficiency gain as cars use 25% more fuel when travelling at 130 km/h as opposed to 100 km/h.

Source D

Data on 4 motorways with variable speed limits 2008–2012

<i>Motorway</i>	<i>Serious accidents per year</i>	<i>Average speed (km/h)</i>	<i>Vehicles per day</i>
M1	10	96	80 000
M2	11	64	72 000
M7	10	98	83 000
M34	9	121	32 000

- (a) Source A claims that “The solution to this is the use of variable speed limits.” What must be the effect of variable speed limits on driver behaviour for this claim to be true? [3]
- (b) How useful is the information in Source C about visual and light pollution in evaluating the effectiveness of variable speed limits? [3]
- (c) Consider Source D. The M2 has much stricter enforcement of the variable speed limits compared with the other motorways. What impact does this additional information have on an assessment of the effectiveness of variable speed limits? [3]
- (d) How likely is it that variable speed limits would make a significant contribution to easing motorway congestion? Write a short, reasoned argument to support your conclusion, using and evaluating the information provided in Sources A – D. [6]

3 *Read the passage and answer the questions below.*

- 1 In some countries, people are rather reluctant to complain when they get poor service in, for example, restaurants. But this is because they lack the courage to stand up for their rights. People should complain more – it is good for them.
- 2 Surveys have shown that in countries where people are not shy of complaining, meals in restaurants are completed more quickly than in those countries where there is a reluctance to complain. This shows that complaining brings results. It follows that you should complain when anything is troubling you. Why put up with a less than satisfactory situation when action can lead to a solution?
- 3 If service providers get the impression that people never complain then they will become complacent and provide poor service. Good service means a good time for all is guaranteed. A key principle that people should follow is to be different and stand out from the crowd. If you complain, then you will stand out from the crowd.
- 4 Complaining does take a certain amount of time and effort. First of all, you need to be clear what exactly you are complaining about. Secondly, you'll need to gather together everything you can by way of evidence. This could include photos or video footage. Remember that you may have to go to court to resolve the complaint so this evidence needs to be convincing to a judge or magistrate. You may find it useful to keep a complaint diary which you can carry around with you to list anything you need to complain about and ask yourself what evidence you would need to put in front of a judge. However, all this time and effort will be well rewarded.

- (a) Using the exact words from the passage as far as possible, identify the main conclusion. [2]
- (b) Using the exact words from the passage as far as possible, identify **three** reasons used to support the main conclusion. [3]
- (c) Evaluate the strength of the reasoning in the argument. In your answer you should consider any flaws, unstated assumptions and other weaknesses. [5]
- (d) 'Complaining is good for your health.'
Write your own argument to support **or** challenge this claim. The conclusion of your argument must be stated. [5]

BLANK PAGE

Permission to reproduce items where third-party owned material protected by copyright is included has been sought and cleared where possible. Every reasonable effort has been made by the publisher (UCLES) to trace copyright holders, but if any items requiring clearance have unwittingly been included, the publisher will be pleased to make amends at the earliest possible opportunity.

University of Cambridge International Examinations is part of the Cambridge Assessment Group. Cambridge Assessment is the brand name of University of Cambridge Local Examinations Syndicate (UCLES), which is itself a department of the University of Cambridge.