



General Certificate of Education  
Advanced Level Examination  
June 2011

# General Studies (Specification A)

# GENA4

Unit 4 A2 Science and Society

Tuesday 21 June 2011 1.30 pm to 3.30 pm

**For this paper you must have:**

- a copy of the Pre-release Case Study Source Material (enclosed)
- a 12-page answer book.

**Time allowed**

- 2 hours

**Instructions**

- Use black ink or black ball-point pen.
- Write the information required on the front of your answer book. The **Examining Body** for this paper is AQA. The **Paper Reference** is GENA4.
- Answer **five** questions.
- Answer **all** questions in Section A and **one** question from Section B.
- Use your own words, rather than simply repeating those used in the sources, to show your understanding of the points being made.

**Information**

- The maximum mark for this paper is 70 (45 for Section A and 25 for Section B).
- This paper consists of two sections.  
**Section A** contains four compulsory questions based on the pre-release Case Study Source Material provided earlier and the new source provided in this examination paper (a new copy of the pre-release material is provided as an insert to this question paper).  
**Section B** contains four alternative essay questions based on Science and Society.
- Write your answers in continuous prose as if you are addressing the intelligent general reader. You will be marked on your ability to use good English, to organise information clearly and to use specialist vocabulary where appropriate.
- Where appropriate use examples to illustrate your answer.

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## Section A

Answer **Questions 1 to 4** using pre-release **Sources A to E** and new **Source F** provided below.

The total for this section is 45 marks.

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### Source F

#### As a society, we seem to have turned on the obese

One Christmas holiday, while I was a medical student, I got a job clearing the garden of a retired ballet dancer. I spent a week or so in the bitterly cold weather turning the frozen soil. When it rained, he would invite me in and show me photographs from his career at the Royal Ballet.

What struck me then, though, was the transformation that he had undergone. In the photos he was fit, toned and flexible. Yet the man sitting in front of me, although still relatively young, could not walk more than a few paces without a stick, let alone tend to his garden. This, he explained, was the price of ballet. Since then, whenever I stand in the foyer and see a member of the audience bent over a stick, I wonder if they, too, were once a ballet dancer now paying for their art.

Yet the person who raised eyebrows last week was not a dancer but a comedienne. Dawn French was seen leaving Matthew Bourne's *Swan Lake* at Sadler's Wells limping and using a stick. Her publicist later explained that this was because of an injury she had sustained while getting out of a taxi, but this didn't stop the rumour mill as people gossiped that it might be because of her size.

This struck me as rather unfair; countless people rely on sticks and many of them are very thin, possibly ex-dancers. Yet no one draws attention to them and the link between low body-mass index and osteoporosis. One fat person with a limp, though? A twisted ankle while getting out of a cab? Of course not, she's crippled herself with all that wanton greed. And the timing couldn't be better, with Christmas here.

All the kill-joys can now remind us that every mince pie takes us, crumb by crumb, to an early death. To be honest, if it means one year less of being lectured to by grey, humourless nutritionists who know the calorie content of toe-nail clippings, then pass the brandy butter.

Poor Dawn, who as far as I know has never attempted to pass on any dieting tips to anyone, is suddenly the focus of attention and being blamed for becoming a "role model for the obese", as one nutritionist complained last week.

As a society, it seems we have a deep-seated need to demonise selected groups, and now that we aren't allowed to burn young, unmarried mothers at the stake, we have turned on the obese. A survey of GPs found that nearly half the doctors believed that statements such as "big is beautiful" can give people an unhealthy attitude to weight problems. But where were all these GPs when Kate Moss was reported as saying "nothing tastes as good as skinny feels"?

Maybe as a doctor you might expect me to be supporting the anti-fat stance, but I strongly believe that the job of doctors – and nutritionists – isn't to stand in judgment over people's lives, but to provide them with information on which they can base a choice. If people want to be overweight then it's up to them, providing they are informed about the risks and are aware of how to change if they want to. Fat, thin, it's none of my business. Now relax and have that mince pie.

Source: adapted from DR MAX PEMBERTON, 'As a society, we seem to have turned on the obese',  
*The Daily Telegraph*, 21 December 2009

0	1
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Using the data and other information in **Source A**, consider why politicians and health professionals need to be concerned about the trends revealed by **Figures 1 to 6**.

*(11 marks)*

0	2
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Using evidence from **Sources B** and **C**, examine the potential difficulties faced in limiting the consumption of junk food by young people.

*(12 marks)*

0	3
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Using evidence from **Source D**, and your own knowledge, consider the success of initiatives to increase participation of young people in sport and to use sport to raise their self-esteem.

*(11 marks)*

0	4
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Compare and contrast the views of the authors of **Sources E** and **F** on the value of exercise and careful dieting.

*(11 marks)*

**Turn over for Section B**

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**Section B**

Answer **one** question from this section.

There are 25 marks for each question.

Where appropriate use examples to illustrate your answer.

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**EITHER**

0	5
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‘The concept of social class is based on envy and prejudice. Class no longer has any relevance to life in contemporary Britain.’

To what extent do you agree that people’s perception of social class is based on ‘envy and prejudice’?

Discuss the claim that social class ‘no longer has any relevance to life in contemporary Britain’.

**OR**

0	6
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‘I don’t care about being accused of self-interest. I don’t want those wind turbines near to where I live. They are ugly, noisy, a threat to birds and a blot on the landscape. As far as generating electricity is concerned there are plenty of more effective options.’

How far do you think that the resident quoted above may have a legitimate case against the environmental impact of wind turbines?

Discuss the claim that there are ‘more effective options’ for the generation of electricity.

**OR**

0	7
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‘Controversies such as the Measles, Mumps and Rubella (MMR) case, accusations of using research evidence on climate change selectively, inaccurate weather forecasting and the extent to which those funding scientific research might influence its findings make it more and more difficult to trust a scientist.’

To what extent do you agree that it is ‘more and more difficult to trust a scientist’?

Discuss the view that the aims of scientists and politicians may often conflict.

**OR**

0	8
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‘There must come a point when a decision has to be taken about continued British involvement in Afghanistan. The Taliban and terrorists must be opposed but the cost of this opposition – politically, economically and in human terms – is becoming too great.’

Explain why British troops were sent to take part in the conflict in Afghanistan.

Discuss the case against maintaining a British military presence in Afghanistan.

**END OF QUESTIONS**