



General Certificate of Education
Advanced Level Examination
June 2012

General Studies (Specification A)

GENA4

Unit 4 A2 Science and Society

Monday 25 June 2012 9.00 am to 11.00 am

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 **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.

Section A

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

There is a total of 45 marks for this section.

Source F

The Prince of Wales launched an attack on climate sceptics

The Prince of Wales launched a stinging attack on “climate sceptics”, deriding them for peddling “pseudo science”. In a speech to world business leaders at a climate change seminar, Prince Charles criticised the group for apparently intimidating people from “adopting the precautionary measures necessary to avert environmental collapse”.

Some experts dispute global predictions for climate change mainly because changes to the planet’s climate have occurred in the past, due to natural causes. Leading figures such as former Conservative chancellor Lord Lawson, and the environmentalist and broadcaster David Bellamy, added their voices to others questioning the conclusions of global warming ‘believers’.

Prince Charles, speaking at the event staged by the Cambridge Programme for Sustainability Leadership at St James’ Palace, did not mention any sceptics by name but said: “People have heard the climate sceptics and attempted to listen to the kind of pseudo science they are peddling....I have endlessly been accused of peddling pseudo science, in one way or another, for most of my life – just think about the strange irony.”

During the last few decades, Prince Charles has attempted to influence public opinion by speaking about the threat climate change poses, and setting up his Prince’s Rainforest Project to try to safeguard the world’s rainforests.

The heir to the throne has also given a number of high profile speeches on the subject on the world stage, including speaking at the 2009 UN climate negotiations in Copenhagen.

During his address today, Prince Charles said: “I have already alluded to the problem of climate scepticism. It appears to be on the rise again with more and more people prepared to listen to those siren voices that say everything is okay, there is no need to worry and that we can all carry on as before as all this fuss about climate change and environmental collapse is merely part of a sinister attempt to undermine the entire foundations of the market-based capitalist system. Well, ladies and gentlemen, I believe the urgency of the situation is too great simply to sit and do nothing.”

Lord Lawson is chairman of the Global Warming Policy Foundation which describes itself on its website as an “all-party and non-party think tank” that aims to bring reason to the climate change debate that has become “seriously unbalanced, irrationally alarmist”.

In an interview with the Telegraph last month, Lord Lawson acknowledged the increase in the planet’s temperature during the last 100 years and that CO₂ gases have “played a part”. But he warned that cutting carbon emissions would threaten the economy. Lord Lawson told the newspaper: “We need to get off this absurd carbon-cessation hook that is hugely damaging to the economy and society. What we should be doing is monitoring what is happening very carefully and closely and preparing to adapt to any changes that might occur.”

Source: adapted from the *London Evening Standard*, 15 July 2010
www.thisislondon.co.uk/standard/article-23856296

- 0 | 1** Assess the importance of the data and other information in **Source A (Figures 1 - 7)** for current and future generations. *(11 marks)*
- 0 | 2** Using evidence from **Source B** and **Source C**, consider how far the climate change summits in Copenhagen and Cancun can be considered a success. *(12 marks)*
- 0 | 3** Using information from **Source D**, and your own knowledge, examine the reasons why many people do not do enough, individually, to take action which might help to 'fight against climate change'. *(11 marks)*
- 0 | 4** Using information from **Sources E** and **F**, discuss the claim made by the Prince of Wales in the two sources that the climate sceptics are 'peddling pseudo science'. *(11 marks)*

Turn over for Section B

Turn over ►

Section B

Answer **one** question from this section.

There are 25 marks for each question.

Where appropriate, use examples to illustrate your answer.

EITHER

- 0 5** 'The sharp rise in tuition fees due to take place in 2012 is unnecessary and will deter many students from going to university.'

Consider the possibility of reducing the number of university places or paying from general taxation as alternatives to increasing tuition fees.

Discuss the assertion that the sharp increase in tuition fees 'will deter many students from going to university'.

OR

- 0 6** 'Rapid developments in information and communication technology, particularly since the 1990s, have transformed business and personal lifestyles but we should be worried about the lack of control and limited safeguards.'

Examine the consequences for business and personal lifestyles of changes in information and communication technology in recent decades.

Discuss the concerns that have been expressed about the lack of control and limited safeguards associated with the expansion of information and communication technology.

OR

- 0 7** 'The National Health Service (NHS) has been in existence for over 60 years. It belongs to another age and is costly, over-managed and inefficient. It should be run by doctors, be more responsive to the needs of patients and open to much more competition.'

To what extent do you agree or disagree that the NHS 'belongs to another age and is costly, over-managed and inefficient'?

Discuss the assertion that the NHS needs to be 'run by doctors, be more responsive to the needs of patients and open to much more competition'.

OR

- 0 8** There have been repeated allegations in the media that some well-known clothes and sports goods retailers in the UK sell items for high prices even though production costs are reduced significantly through the exploitation of cheap labour in developing countries.

Using specific examples, examine the economics and morality of the use of sweatshop labour in developing countries.

Discuss why it is so difficult to control the use of cheap and unregulated labour in developing countries.

END OF QUESTIONS