



General Certificate of Education  
Advanced Level Examination  
June 2014

# General Studies (Specification A)

# GENA4

## Unit 4 A2 Science and Society

Monday 9 June 2014 9.00 am to 11.00 am

**For this paper you must have:**

- a copy of the Pre-release Case Study Source Material (enclosed)
- an AQA 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 **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.
- Do all rough work in your answer book. Cross through any work you do not want to be marked.

**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.

**Advice**

- Use examples to illustrate your answer where appropriate.

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## 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.

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### Source F

#### Organic market report 2012

##### Report Summary

Global sales of organic products continue to defy the economic downturn, growing by 8.8% in 2010 with growth continuing into 2011. The only exception is in the UK where, despite areas of strong growth and improvement in the long-term trend, overall sales were down by 3.7% in 2011, according to the latest organic market analysis by the Soil Association.

Strong growth has continued in all other major European organic markets and in the US, the world's leading organic market. Sales of organic products in China have quadrupled in the last five years and Brazil is reporting an annual growth rate of 40%. Market analysts predict that organic sales in Asia will grow by 20% a year over the next three years.

In the UK, the main cause of the market's overall decline was a 5% drop in multiple retail sales, which account for 71.4% of organic food sales. Reduction of choice, lack of communication about the reasons to buy organic products and a lack of investment in own-label organic ranges are key factors in the decline.

Despite the tough environment, there are a number of UK organic success stories, including baby food (+6.6%), lamb (+16%), poultry (+5.8%) and cosmetics (+8.7%). Innovation in retail has benefited the sector, with sales through box schemes, home delivery and mail order up by 7.2%.

Other key findings in the Soil Association's Organic Market Report include:

- The growth in sales through box schemes, home delivery and mail order (up 7.2% to £167 million) meant that independent retail sales increased their share of the organic market to 28.6%.
- Local and direct sales of organic fruit and vegetables and supermarket sales of organic fruit held their own, despite a drop in sales of organic vegetables and salads through multiple retailers.
- Outside the retail sector, sales to the restaurant and catering sector grew by 2.4%. Notable successes in 2011 include an increased take-up in schools, nurseries and hospitals.
- UK organic land area decreased by 2.8% and represents 4.2% of farmland. The most encouraging picture was in England where the rate of conversion slowed, but fully organic land area increased by 16%.
- 8 out of 10 households bought organic products in 2011.

Source: adapted from 'Organic Market Report 2012', Finn Cottle and James Twine

© Soil Association 2012

[www.soilassociation.org/market](http://www.soilassociation.org/market)

0	1
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Using the data and other information in **Source A (Figures 1–7)**, discuss the main causes and consequences of changing world food prices in the 21st century.

[12 marks]

0	2
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Using information from **Source B** and **Source C**, examine the case for relaxing controls on the cultivation of Genetically Modified (GM) crops in Britain.

[11 marks]

0	3
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Using evidence from **Source D and your own knowledge**, consider how far British dairy farmers are justified in taking direct action to increase the price they receive for the milk produced on their farms.

[11 marks]

0	4
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Using evidence from **Source E** and **Source F**, discuss the potential for the production and sale of organic food in Britain.

[11 marks]

**Turn over for Section B**

**Turn over ▶**

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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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‘Despite changes in the law in the last 40 years it still cannot be said that gender stereotyping has ended and that equality between males and females has been fully established.’

Discuss the factors which have made it difficult to reduce gender stereotyping and achieve full equality between the sexes.

Using specific examples, explain how successful females can be inspirational to others in any walk of life.

**or**

0	6
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‘The research evidence against smoking cigarettes is compelling and well-publicised. Despite this, and the measures taken by Parliament to deter smokers, many people continue to smoke.’

Explain the adverse medical effects that smoking is likely to have on the health of individuals.

Discuss the effectiveness, and the legitimacy, of measures taken by the state to discourage people from smoking cigarettes.

**or**

0	7
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‘There is a north–south divide in Britain. The advantages and opportunities seem to be confined largely to London and the South East.’

Discuss the extent to which you would support this assertion.

Explain why it is difficult to reduce the north–south divide in Britain.

**or**

0	8
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‘As Britain and other countries reduce their role in Afghanistan, the overwhelming impression is that the recent years of intervention and conflict in Afghanistan have been tragic, costly and futile.’

Discuss the view that the involvement of British forces in the affairs of Afghanistan since 2001 has been ‘tragic, costly and futile’.

To what extent does the UK have the right to intervene in the internal affairs of other countries?

**END OF QUESTIONS**