

General Studies (Specification B)

GENB3

Unit 3 Power

Specimen paper for examinations in June 2010 onwards
The question paper for this unit uses the new numbering system

Insert

SOURCE MATERIAL

These texts are to be read in conjunction with unit GENB3.

The questions arise from the texts.

Use the texts, and your own knowledge to answer both questions in Section A, and **either** Question 3 **or** Question 4 in Section B.

Study **Texts A** to **D** and answer **both** questions in Section A and **one** question in Section B

Text A

THE NEW COAL RUSH

Coal – the most polluting of all fuels in the most polluting of all sectors – may be about to stage a major comeback in the UK. In December 2006, the energy giant Eon applied to build the first new coal-fired generating units in the UK in 33 years and now Medway Council in Kent is considering the application. Staggeringly, each of the two units Eon proposes would emit more carbon dioxide than 24 of the world's lowest emitting countries combined.

The units they're proposing are only 45 per cent efficient, meaning that most of the energy is lost as waste heat before it even reaches the transmission lines – pretty scandalous in an age where countries like Denmark are achieving up to 90 per cent efficiency in their power plants.

If Eon is given permission to build these new units at its Kingsnorth power plant in Kent, this could be the start of a whole spate of new applications for coal plants. Under New Labour, coal has become cheaper to burn than the less polluting natural gas – as a result, its use has risen.

A couple of months ago, we sent out an e-update explaining that coal may be facing a renaissance in the UK. Now is the time to act; the local council in Kent is now considering the application. If you have a few minutes to spare, please help us to make sure the new coal rush never has a chance to get off the ground: write a letter to Chris Butler, the planning officer in charge at Medway Council. The UK doesn't need more outdated, inefficient coal fired power plants. We need an energy system that can meet the demands of the 21st century based on energy efficiency and renewables.

Source: adapted from www.greenpeace.org.uk/blog/climate/the-new-coal-rush, posted on 30 April 2007



Source: Photograph by GARETH FULLER/PA

A protester wearing a caricature of prime minister, Gordon Brown, is searched by police at the climate camp near Kingsnorth power station in Kent.

Text B

Hatch Yourself a Fairer Easter

Easter provides us all with a perfect excuse to relax with friends and family and enjoy a chocolaty treat and what could be better for chocolate lovers nationwide than to indulge in some of the very best Fairtrade chocolate eggs, knowing that the farmers have been paid a fair price for their cocoa plus an additional premium to invest in community development projects?



Sales of Fairtrade chocolate products have risen by 41% in 2007 on the previous year from £23.2m to £32.7m, meaning that Fairtrade farmers are able to earn enough for today and a better life for tomorrow. This increase in sales shows the public's appetite for Fairtrade in the UK, but there is still much more to be done. With 2 billion people earning less than \$2 a day and many farmers often forced to sell below what it cost them to produce their crop, sales of Fairtrade products need to increase significantly.

A representative of Kuapa Kokoo Cocoa Growers' Co-operative in Ghana, said: "I have been a member of the co-operative since 1995 and in that period I have seen a great deal of improvement through Fairtrade; the school has become better, the women are starting to earn more money from extra income-generating activities and at the moment we are in the process of putting up a meeting hall for the village."

Through Fairtrade, cocoa farmers have benefited from developing a strong, democratic institutional framework at all levels of their organisation. Kuapa Kokoo is a co-op union of 937 village societies, representing about 40 000 farmers. Members are predominantly poor small scale farmers living in the most remote and deprived parts of the country. Most of the cocoa growing villages have invested in clean drinking water, paved roads, health delivery systems, improved transport, electricity and basic schools with educational materials and teachers.

This year there is more choice than ever before for chocoholics. Hunt out the delicious Dark Easter Egg with Brazil Nuts from Divine Chocolate. The cocoa comes from Kuapa Kokoo farmers where the farmers are also part-owner shareholders in Divine Chocolate. To accompany your traditional Easter Sunday lunch, try Mendosa Vineyard Fairtrade wine. And if you're on the prowl for the perfect Easter gift for tiny tots, look out for Hug's new Tiger T-shirt and bib range for babies. The cotton is grown by disadvantaged small scale farmers in Egypt and India.

Source: adapted from © 2008 Fairtrade Foundation

Turn over for the next source

Text C

Doing our duty earns us freedom

The French philosopher, Sartre (1905–1980), argued that we are born free, but rather than see this as a licence to do whatever one wants, he placed the idea of responsibility at the centre of his concept of freedom.

He said we are 'condemned to freedom'. We cannot help but choose – even to do nothing is a choice. Freedom and responsibility go hand in hand – not a bad message for today's society when everyone seems to know their rights, yet few want to accept responsibility.

His philosophy demands that all of us ask ourselves a very personal question: what gives my life meaning?

One of the reasons for binge drinking, drug use and rising rates of work-related anxiety is people's inability to find meaning in their lives. The German philosopher Nietzsche (1844–1900) did proclaim 'God is dead', but this was not a licence for immoral behaviour.

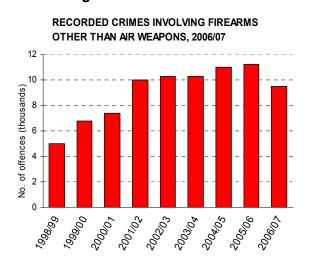
Now is the time when our country could benefit from the message that freedom and responsibility are inextricably linked.

Source: adapted from a letter by ANDREW J SMITH, Roehampton University, Daily Mail, 21 April 2008

Text D

What do we really know about the extent of gun crime in England and Wales?

During 2007, nine young people lost their lives in shootings, including the killing of 11-year-old Rhys Jones in Liverpool. According to Home Office figures, there were 59 firearms-related homicides in 2006–07 compared with 49 in the previous year. That is an increase of 18% in just one year. There were 507 serious injuries from firearms – more than one incident a day, but at the same time, the trend in gun crime overall has been going down.

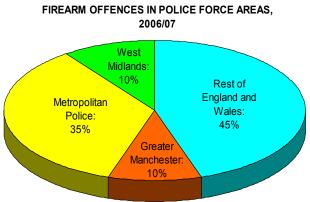


Map of fatal shootings

Overall firearms offences, including air guns, fell 14% in 2006–07 from 21 527 incidents to 18 489. Just over half of all firearms offences occurred in just three major forces – in London (Metropolitan Police), Greater Manchester and the West Midlands.

The trend in firearms offences is down in the West Midlands, Greater Manchester and London. However, there have also been recent rises. 2006–07 saw a 3.5% rise in firearms offences in London – up from 3485 to 3607 incidents.

What all of this means is that we cannot draw any simple nationwide conclusions about gun crime. What we can say with certainty is that gun crime is a problem that remains closely focused in some cities that have witnessed some terrible deaths. The figures do not show that gun crime is prolific or widespread in England and Wales.



Knife crime

In fact, the most common weapon used in a violent crime in England and Wales is not a gun – but a knife. There are four times more knife-related killings than firearms-related killings.

The Centre for Crime and Justice Studies at King's College London recently conducted some deeper analysis of the available Home Office's statistics. It concluded that between 22 000 and 57 900 young people could have been victims of knife crime in 2004. However, it says without better official data it is impossible to know for sure – and that we need that data to improve the public debate.

Text D continues on the next page

Text D continued

The Home Office has pledged to change the way crime figures are presented to help the public better understand the impact on their area. One of the key changes is going to be separate knife crimes figures from 2008.

The question of youth

Figures show the number of young people killed year-on-year in violent crime is relatively small and volatile – apparently dramatic changes can be statistically misleading. In 1995, 44 people between five and 16-years-old were victims of homicide. In 2005–06 the number was less than half of that – and during the in-between years it varied wildly. In the last year, it went up again. Crucially, almost half of all child victims are killed by a parent.

We don't have a figure for the total number of violent youth offenders because of the way data is collected. However, almost a fifth of all crimes committed by under-18s are violent offences, second only to theft, and the number of violent crimes has risen consecutively for four years. The vast majority are minor assaults – frightening for the victim, but usually dealt with by warnings from the police.

Source: adapted from DOMINIC CASCIANI, Home affairs reporter, BBC News, January 2008 Home Office statistics, www.homeoffice.gov.uk

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