

General Certificate of Education Advanced Level Examination

General Studies (Specification B)

GENB4

Unit 4 Change

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

Insert

STIMULUS MATERIAL

These texts are to be read in conjunction with unit GENB4.

The questions arise from the texts, but they should **not** be answered by reference to these texts alone.

Text A

Are biofuels the road to go down?

Q. What is biofuel?

A. Biofuel describes any type of transport fuel made from organic matter. It covers good stuff like recycled cooking oil and biogas from waste, as well as more problematic agrofuels, made from crops like palm oil and soya grown on large plantations often in poorer countries.

Q. Agrofuels sound a lot less friendly than biofuels.

A. They are. Crops like palm oil and soya are making huge demands on land in Indonesia, Malaysia and Brazil. To make way for them companies are clearing rainforests, destroying peat bogs and damaging other important ecosystems.

Q. But aren't we going to need agrofuels to cut emissions?

A. In theory agrofuels are carbon neutral. In reality, there are many sources of greenhouse gases in their life cycle. First, the destruction of rainforests and peat bogs, both important carbon sinks. Clear them and the carbon stored is released. Then there's the energy demand from industrial farming, including the release of nitrous oxide from inorganic fertiliser. Nitrous oxide is a powerful climate gas. Add to this the emissions from processing the crops and the fuel it takes to ship it to motorists around the world and it's clear agrofuels are far from carbon neutral.

Q. So, their benefits to the climate are being questioned?

A. Nobel prize-winning chemist Paul Crutzen has shown that rape-seed oil diesel, which is the most commonly used type of agrofuel in Europe, contributes 70 per cent more to climate change than its fossil equivalent, due to nitrogen emissions from fertiliser.

Q. What about the benefits fuel crops are bringing to people in poorer countries?

A. In many countries the huge expansion of plantations is pushing small farmers off their lands and exacerbating conflicts. The UN has also warned that agrofuels compete with food for land. This pushes up global food prices – it's already contributed to the riots in Mexico due to the rising price of maize.

Q. What if agrofuels were grown locally?

A. Fuel from crops grown in the UK and Europe are thought to be better – they don't threaten rainforests directly – but it's just not possible to meet demand with domestic production. The current target proposed by the EU means that by 2020, 10 per cent of all transport fuel will have to come from agrofuels. An estimated 40 per cent of all arable land in Europe would need to be converted to agrofuel production to meet this target.

Aside from this there are indirect effects. Use up all the maize grown in the UK in our cars and you end up with a shortage of animal feed. The result: a rise in demand for soya from South America, and more rainforest destruction.

Q. Why do the UK and the EU continue to promote agrofuels as a solution?

A. The science is moving quickly. New reports weekly warn of the negative impacts of agrofuels. Also the car industry has been successful at avoiding stricter legislation on car efficiency, promoting high agrofuel targets as a solution instead.

Source: Friends of the Earth, *Earthmatters*, Spring 2008

Text A continued

						Unit: Thousand tonnes		
Year	Biodiesel	Total Diesel	Biodiesel % share	Bioethanol	Total Petrol	Bioethanol % share	Total % biofuel share of road fuel	
2002	2.3	16,431	0.01	0.0	20,620	0.00	0.01	
2003	16.2	17,378	0.09	0.0	20,172	0.00	0.04	
2004	17.4	18,438	0.09	0.0	19,901	0.00	0.05	
2005	27.3	19,313	0.14	62.9	18,920	0.33	0.24	
2006	140.4	20,188	0.70	70.1	18,206	0.39	0.55	
2007	280.0	20,831	1.34	105.0	17,729	0.59	1.00	

Consumption of Biodiesel and Bioethanol* in the UK

Source: © Crown Copyright, HM Customs and Revenue (includes estimate for 2007)

* Bioethanol – ethyl alcohol that is a by-product of the sugar-fermentation process. It can be got from corn, maize, sorghum and many other plants.

Turn over for the next stimulus material

Text B

Novelty and Nonsense

For many in Britain, modern art was summarized by the name *Pablo Picasso*. Though popular, artistic appreciation of Picasso had altered very little since before the First World War when, at Roger Fry's Post-Impressionist exhibition, Desmond McCarthy had had to carry out a man so helpless with laughter that he seemed to be endangering his life. In 1945, a large Picasso-Matisse exhibition at the Victoria and Albert had been ferociously reviled¹. British insensitivity, however, was not unparalleled: an aristocratic lady, carrying her portrait by Picasso, was charged by Spanish customs officials with attempting to smuggle out a map of the fortifications of Madrid.

Picasso's innovations were not unanimously accepted by British artists. Michael Ayrton, a young painter, sculptor, stage designer, book illustrator, art critic of the *Spectator* and novelist, admitted Picasso's genius and technical mastery. Though he acknowledged his influence on the applied arts and decoration, he believed that this was largely to art's disadvantage, and that Picasso's originality was less than it at first sight appeared. Indeed, he claimed that much was a regurgitation of the ideas and formulae of others, without coherent vision or organic conviction, more an intellectual exercise, 'a vast series of brilliant paraphrases on the history of art'. His were superhuman talents striving to communicate the spurious², intriguing the credulous with exciting trappings of bulls, women, guitars, blood, cruelty, harlequins, circus performers.

Intellectuals mostly ignored this, though in an interview published in 1951, Picasso told Giovanni Papini, perhaps jokingly, that he was only a public entertainer exploiting his contemporaries' imbecility, vanity and cupidity³. 'Since Cubism, and indeed, before it, I have aimed to satisfy a public craving for novelty and scandal with all the bits of nonsense that enter my head, and the less they understand the greater their admiration for me.'

Source: adapted from PETER VANSITTART, In the Fifties, 1995

¹ reviled – abused, mocked
² spurious – false
³ cupidity – greed

Text C

A formula for morality

Suppose we open the *News of the World* on Sunday and find pictures of a nude Gordon Brown engaging with prostitutes in a scenario seeming to allude to German history. He would be out of No.10 by lunchtime.

Max Mosley, though, runs an organisation – Formula One – which is the opposite of a public body. *Grand prix* racing is notorious as the only major sport owned privately by a few men. Mosley takes money from the public, through tickets and TV fees, but he is not state-paid or nation-representing – the basis for kicking out Brown. So, on these criteria, Mosley stays.

Ah, no, the response comes, any public figure has a duty to uphold certain standards. And yet Formula One is not the Church of England. What values might the *grand prix* business stand for? Three that come easily to mind are personal gratification, greed and risk-taking. Mosley's sex life can be said to have upheld these principles.

The problem has always been where the line should be drawn, partly because the boundaries shift. Forty years ago, divorce could end the career of a children's entertainer; now, the disqualifying threshold seems to be use of class-A drugs. But is this morality now solid, or might there be a future in which a known 'cokehead' can continue being cheeky for pre-schoolers on TV?

The latter seems unlikely but the fluidity of definitions is a constant difficulty. A common view, sanctified by the Press Complaints Commission, is that there must be a direct connection – usually hypocrisy or conflict of interest – between private and public conduct. So, a bishop's mistress is a different matter from a baker's. But this rule is difficult for Mosley. Just as the children of a home secretary must expect more scrutiny of their drug use than the average adolescent, so the son of the leader of the British Union of Fascists needs to be extra careful, even behind closed doors, about touching certain sores.

Source: adapted from MARK LAWSON, The Guardian, © Guardian News & Media Ltd., 5 April 2008

Turn over for the next stimulus material

Text D

Farming for a better future

Coming from a background in social enterprise rather than farming, Heather Anderson and Pete Ritchie put making connections and building a relationship with their customers at the heart of their business. They have been farming at Whitmuir's 140 acres for seven years and became fully organic four years ago. Their aim is to sell their produce within a thirty-mile radius of their farm, at Lamancha in the Scottish Borders, just south of Edinburgh. The farm produces organic meat, eggs, over 40 varieties of vegetables and a range of soft fruit.

On a bright Saturday in January, with a biting wind coming up the valley, the farmyard was bustling with customers visiting their farm shop and looking in on the livestock – a small herd of Shorthorn cattle, some Tamworth-cross pigs, the sheep and hens. Open seven days per week, the shop sells a wide range of home-grown seasonal fruit, and vegetables, eggs, cheese, bread, milk, groceries and ice-cream along with fair-trade products plus, of course, locally-reared beef, pork, mutton and lamb from their own butchery.

By word of mouth alone, Pete and Heather have built up a core group of 'supporters' who pay a regular standing order. Whitmuir lets them know what's available and they can then order what they want, when they want it, and it is charged to their account. So Pete and Heather benefit from a regular and predictable income while supporters obtain food of the best quality and gain a real connection to its production.

The connections aren't just to the farm. Cows and sheep produce significant quantities of methane, a potent greenhouse gas. Pete estimates one cow is responsible for producing as much greenhouse gas as a small car. To compensate, customers pay a small carbon offset charge – 10p per kilo of meat – which is currently supporting the creation of new native woodland by the local Leadburn Community Woodland Group.

Source: adapted from PHILIP REVELL, Triodosnews, Spring 2008

Text E

Bill of Rights

I live and work in the loyalist working-class estate Old Warren in the affluent city of Lisburn, just outside Belfast.

It was not until the late '90s that I fully understood the power of human rights and the benefit that a Bill of Rights could bring to our community. In the early '90s our estate was considered the 'second least popular housing estate in Northern Ireland' because of the poor housing. It is also a community that has been stigmatised as a direct result of the conflict. I worked as a volunteer and then as the community worker.

In 1998 we developed a programme for young men in the area. As part of it the young men asked to learn more about their rights in relation to the police. We invited the Committee on the Administration of Justice (CAJ) to speak to about 40 young men and CAJ director Maggie Beirne responded. Maggie initially talked about and answered questions on policing powers and then opened up the debate and asked the young people what they believed they needed to 'flourish as human beings'. The list that came out of that group was then linked to the Universal Declaration of Human Rights.

The first campaign the young men carried out was the right to heating. They forced the housing authorities to reverse a decision and to fulfil their obligations to consult tenants about changes to heating installations in their homes.

Buoyed by their success and with the support of Maggie and the CAJ the young men pressed on and campaigned on Social Housing for Social Justice. The housing authority was challenged regarding its intention to sell off public land, part of Old Warren Estate, to private developers Again the young men were successful and the Northern Ireland Housing Executive, instead of selling the land, invested in the estate thereby transforming the image of the area and increasing the social housing stock.

Maggie Beirne leaves CAJ soon, but what she and others have given to my community is the dignity and respect and the power to effect social change that comes through using the language of human rights.

Source: FIONA MCAUSLAND, Amnesty Magazine, January/February 2008

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