



Cambridge International AS Level

ENGLISH GENERAL PAPER

8021/02

Paper 2 Comprehension

For examination from 2019

SPECIMEN INSERT

1 hour 45 minutes



INFORMATION

- This insert contains all the resources referred to in the questions.
- You may annotate this insert and use the blank spaces for planning. **Do not write your answers** on the insert.

This document has **6** pages. Blank pages are indicated.

Material for Section A

Introduction

Karatola, a newly-independent country, is experiencing a period of tension with Ursus, the country from which it has separated. As part of its overall strategy, Karatola is looking at energy options, including the development of sustainable energy.

... and wind is a clean source of renewable energy that produces no air or water pollution ... 5
 operating costs are minimal once the turbines are erected ... whilst modern wind turbines usually
 consist of a solid base with three rotor arms connected by a horizontal axis to a tall tower and look
 like an aeroplane propeller ... the construction enables the blades to move to be perpendicular
 to the wind ... the speed of rotation is between 10 and 20 revolutions per minute ... a small
 wind farm of 10 turbines, over its twenty-year life span, has the capacity to generate an amount 10
 of electricity that is the equivalent of 3 million tonnes of coal or 6.3 billion cubic feet of gas ...
 the energy produced can be fed into the national electricity distribution network and make a
 significant contribution ...

Extract from *Encyclopaedia Cantabrigiensis*.

We at Blowin' in The Wind are confident that the citizens of Segono are behind our scheme: a 15
 recent survey showed that over 80% of those questioned were in favour. A trust fund will be set
 up to enable the community to invest in local projects. We can assure you that all the equipment
 will be delivered to the coastal site using the town's perimeter road, during designated hours
 and with a police escort. We expect construction work to take up to one year. The blades will
 be 40m in length, grey in colour with a non-reflective surface and the maximum height of the 20
 turbines will be 110m to blade tip. Each turbine will have a 2MW capacity, which is estimated to
 avoid the emission of 3000 tonnes of carbon dioxide per year. The operational life of a turbine
 is 20 years, after which the site will be decommissioned. We anticipate that construction and
 ongoing maintenance will provide employment opportunities for local firms.

Extract from the proposal by the *Blowin' in The Wind Developments Company*. 25

Local reaction

The proposal to build a wind farm at Segono, a coastal town of 6000 households in the south of Karatola, has aroused some opposition from residents, many of whom make a living from fishing and tourism. At a public meeting the following comments were among a number made.

Louis Logica: It's all nonsense – absolutely no need for it whatsoever – we can get energy here 30
 from our own natural resources and we can get all the oil we want from other countries such as
 Ursus. Just imagine the noise from these monsters, whizzing so fast – they'll make you dizzy –
 no-one in the town would ever sleep! And the sight of them – as tall as 100 houses, they'll be
 seen from everywhere, and once they're up they'll be going round forever! And what about our
 fishing? They'll frighten the fish away and the draught will probably blow our boats off course. 35
 And whilst they're being built we'll have lorries thundering through the town day and night – it
 won't be safe to let our children out! I've spoken to almost everyone in the town and they're all
 against the idea – why don't they site it somewhere else as we won't get anything out of it? And
 what if the wind's in the wrong direction? You won't even be able to watch television ...

Peter Profundus: As you all know, the Government is committed to reducing our carbon emissions to meet national and international targets. Border disputes with Ursus mean that we are vulnerable and it's important that we follow a policy of self-sufficiency. Of course, I am as committed to renewable energy as the next person, but it has to make sense, and this is the wrong place for a wind farm. There is no doubt that the unsightly wind turbines will have a detrimental effect on our quality of life and could have an impact on our tourist industry. There are likely to be problems as the long, slow loads may interrupt the flow of traffic. Will people visit Segono knowing that they are going to be stuck in their car? Most of the electricity produced will be used in other parts of the country; so why not locate the turbines somewhere else? Has anyone looked into other forms of sustainable energy that wouldn't have the same impact? I'm also concerned about our wildlife, especially the birds ...

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Material for Section B

Introduction

Walter Isaacson, the biographer of Steve Jobs (the co-founder of Apple Inc.) wonders what it was that made Jobs so smart.

Sparked by some kind of genius

One of the questions I wrestled with when writing about Steve Jobs was how smart he was. On the surface, this should not have been much of an issue. You'd assume the obvious answer was: he was really, really smart. After all, he was the most innovative and successful business leader of our era and embodied the Silicon Valley dream writ large: he created a start-up business in his parents' garage and built it into the world's most valuable company. 5

But I remember having dinner with him and someone bringing up one of those brain-teasers involving a monkey having to carry a load of bananas across a desert, with a set of restrictions about how far and how many the monkey could carry at one time, and you were supposed to figure out how long it would take. Jobs tossed out a few intuitive guesses but showed no interest in grappling with the problem rigorously. I thought about how Bill Gates, the tech giant, would have gone click-click-click and logically worked out the answer in 15 seconds, and also how Gates devoured science books as a holiday pleasure. But then something else occurred to me: Gates never made the iPod. Instead, he made the Zune*. 10 15

So was Jobs smart? Not conventionally; instead, he was a genius. That may seem like a silly word game, but in fact his success dramatises an interesting distinction between intelligence and genius. His imaginative leaps were instinctive and unexpected. They were sparked by intuition, not analytical rigour. Trained in Zen Buddhism, Jobs came to value the wisdom of experience over scientific analysis. He didn't study data or crunch numbers, but like a pathfinder he could sniff the winds and sense what lay ahead. 20

He told me he began to appreciate the power of intuition, in contrast to what he called 'Western rational thought', when he wandered around India after dropping out of college. 'The people in the Indian countryside don't use their intellect like we do. They use their intuition instead ... Intuition is a very powerful thing, more powerful than intellect, in my opinion. That's had a big impact on my work.' 25

Jobs also had a lot of imagination and knew how to apply it. As Einstein said, 'Imagination is more important than knowledge'. Einstein is, of course, the true example of genius. He had the elusive qualities of genius, which included an intuition and imagination that allowed him to think differently (or, as Jobs' adverts said, to 'Think Different'). Both Einstein and Jobs were very visual thinkers. The road to relativity began when the teenage Einstein kept trying to picture what it would be like to ride alongside a light beam. Jobs spent time almost every afternoon walking around the studio of his brilliant design chief, Jony Ive, and fingering foam models of the products they were developing. 30 35

Jobs' genius wasn't in the same quantum orbit as Einstein's. So it is probably best to ratchet the rhetoric down a notch and call it ingenuity. Gates is super-smart, but Jobs was super-ingenious. The primary distinction, I think, is the ability to apply creativity and the power of design to a challenge. In the world of invention and innovation, that means combining an appreciation of the humanities with an understanding of science – connecting artistry to technology, poetry to processors. This was Jobs' speciality. 'I always thought of myself as a humanities person as a kid, but I liked electronics. Then I read something that one of my heroes, Edwin Land of the Polaroid camera company, said about the importance of people who could stand at the intersection of humanities and sciences, and I decided that's what I wanted to do.' 40 45

The ability to merge creativity with technology depends on one's ability to be emotionally attuned to others. Jobs could be petulant and unkind in dealing with other people, which caused some to think he lacked basic emotional awareness. In fact, it was the opposite. He could size people up, understand their inner thoughts, persuade them, intimidate them, target their deepest vulnerabilities, and delight them at will. He knew, intuitively, how to create products that pleased, interfaces that were friendly, and marketing messages that were enticing. 50

In the history of ingenuity, new ideas are only part of the equation. Genius requires execution. When others produced boxy computers with forbidding interfaces that confronted users with unfriendly green prompts that said things such as 'C:\>', Jobs saw there was a market for an interface like a sunny playroom. Hence, Apple's Macintosh. Sure, Xerox came up with a graphical interface, but the personal computer it built was a flop and it did not spark the home-computer revolution. Between conception and creation, TS Eliot** observed, there falls the shadow. 55

*The Zune was a music service and player, which allowed users to stream and download tracks.

**T S Eliot was one of the twentieth century's major poets.

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Copyright Acknowledgements:

Question 2

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