Cambridge Assessment International Education

Cambridge IGCSE®

FIRST LANGUAGE ENGLISH **0500/01**

Paper 1 Reading **For examination from 2020**

SPECIMEN INSERT **2 hours**

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INFORMATION

- This insert contains the reading texts.
- 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.

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Read **Text A**, and then answer **Questions 1(a)–1(e)** on the question paper.

Text A: Project Mammoth

This text is an article about a new scientific project.

Of all the incredible possibilities presented by controversial new scientific techniques, perhaps the most intriguing are efforts to bring animals back from extinction. Candidates for 'de-extinction', as the process is known, include species like the passenger pigeon (the last one died in captivity in 1914) and the dodo (last seen in 1662).

These projects are not just distant dreams.

Scientists working on such projects estimate that a variation of the first new woolly mammoth (which disappeared some 4 000 years ago) may soon be born. They hope these animals will play a role in slowing or reversing the effects of climate change.

The basic idea behind how it would work is that scientists would first retrieve DNA from the remains of a woolly mammoth that had been preserved for centuries in the frozen tundra[1] and use that to alter the DNA of modern Asian elephants. According to scientists, the two species are so closely related that if mammoths were alive today they could successfully breed with elephants. Tweaking the Asian elephants' DNA to more closely resemble that of their ancient relatives could mean elephants might be able to give birth to a furrier, fattier hybrid.

Scientists say this work is decidedly not about creating Mammoth Park – the creature would not be a perfect copy of a mammoth anyway. The hope is that these mammoth-like Asian elephants will be more resistant to cold and will repopulate the tundra and coniferous forest in Eurasia and North America. Scientists feel that this will help to protect endangered Asian elephants and revive an ancient grassland in the tundra, which could prevent the melting of Siberia's permafrost.

The project is not without its critics who claim the idea is no more than a gimmick, seducing scientists into thinking they are saving the world and distracting us from guaranteeing our planet's biodiversity for future generations with promises of being able to fix mistakes later.

Scientists defending the idea explain, 'We're just bringing DNA back from the past to improve modern survival and diversity. The Asian elephant faces threats to its existence – it's going extinct, just like the mammoth did, and mainly because of humans. Bits of mammoth DNA can give them a better chance of survival.'

[1] **tundra**: a vast treeless plain in the Arctic where the subsoil is permanently frozen

Read **Text B**, and then answer **Question 1(f)** on the question paper.

Text B: Waking the Baby Mammoth

This text is a review of a television programme called 'Waking the Baby Mammoth'.

Only a handful have been found before. But none like her. Her name is Lyuba. A one-month-old baby mammoth, she walked the tundra about 40 000 years ago, then died mysteriously. Discovered on a riverbank in Siberia, she's the most perfectly preserved woolly mammoth ever discovered. Lyuba has mesmerised the scientific world with her arrival – creating headlines across the globe.

'Waking the Baby Mammoth', a new television programme, tells the tale of this single accidental discovery of a frozen baby mammoth in the Siberian tundra and how the discovery has enriched our understanding of these extinct magnificent beasts.

The programme begins with the incredibly fortunate discovery of Lyuba by a reindeer herder who feared that disturbing the remains of the dead might lead to a curse. Too often with such findings, the preserved creature would be dug up and sold, leading to irreversible decomposition and the loss of a treasure trove of valuable information. However, the herder had enough foresight to contact authorities, and scientists began the careful retrieval process. Everyone wanted to know how Lyuba had died. What could she tell us about life during the Ice Age and the Earth's changing climate?

The programme follows the scientific process and the hurdles in understanding where Lyuba came from and what she can tell us about her Pleistocene[1] life. That being said, apart from specific experiments involving high-tech bone scans, tissue extraction and dental examinations, the programme does not delve too far into the intricate data. We are left wondering whether scientists will be able to extract her DNA, and what secrets that might uncover. It's impossible to watch the work on Lyuba without sharing the anxiety the scientists must have felt to get it right.

The programme succeeds brilliantly in bringing drama to a quite amazing story. We are presented with stunning 3D animations of Lyuba and her mother. In cinematic form, Lyuba is brought to life as an active furry baby mammoth, bouncing along next to scientists as they contemplate the frozen carcass's secrets. The visuals are beautiful – light shines off the baby's fur and her shadows dance in just the right way to really make her come alive.

The programme has truly woken the baby mammoth within our minds and hearts.

[1] **Pleistocene**: the Ice Age, which lasted over 2.5 million years and ended about 12 000 years ago

Read **Text C**, and then answer **Questions 2(a)–(d)** and **Question 3** on the question paper.

Text C: The Gift

This text is taken from a longer narrative. At this point in the story, it is the night of Natalia's sixteenth birthday. Her grandfather, a doctor, has arrived back late at night from visiting patients. He has woken Natalia and asked her to follow him quietly through the streets of their city.

We were nearing the end of our side street and I assumed the silence of our walk would be shattered by the bustle along the tramway. But when we got there, nothing, not even a single passing car. Every window was dark. The hazy moon seemed to gather the silence up around it like a net. Not a sound: no sirens, no rats in the bins that lined the street. My grandfather stopped, looked up and down the street, then turned left.

'It's not far now,' he said.

I caught up with him long enough to see that he was smiling. 'Not far to where?' I said, out of breath, angry. I drew myself up and stopped. 'I'm not going any further until you tell me.'

He turned to look at me, indignant. 'Lower your voice you fool,' he hissed. Suddenly his arms went over his head in a wide arc. 'Can't you feel it? No one in the world awake but us.' And off he went again.

We passed empty windows of shops that had gone out of business; lightless buildings; a beggar sleeping so soundly that I would have thought him dead if I hadn't realised that the moment had closed around us, making everything still.

Suddenly grandfather stopped ahead of me and stood, pointing into the distance, his hand shaking with excitement.

'There,' he said. 'Look!'

I peered out into the street. On the other side, there was a street lamp with a dying bulb. I was opening my mouth to say 'What?' and then I saw it. Half a block from us, an enormous shadow was moving along the street.

At first I thought it was a tram, but its shape was too organic, too lumpy, and it was going far too slowly for that, making almost no noise. It was swaying, swaying up the street with an even momentum in a rolling motion that was drawing it away from us like a tide, and every time it rocked forward, something about it made a soft dragging sound on the rails. As we watched, the thing sucked in air and then let out a deep groan.

'That's an elephant!' I said.

My grandfather said nothing. His glasses had fogged up during the walk, but he wasn't taking them off to wipe them. He took my hand; we watched the animal.

Its ears were folded back against the domed, bouldered head with big-lidded eyes; the arched roll of the spine fell away into the hips; dry folds of skin shook around the shoulders and knees as it shifted its weight. It seemed to take up the whole street. It dragged its curled trunk like a fist along the ground.

Several metres in front of it, holding a bag of something that must have been enormously tempting, a short young man was walking slowly backward, drawing it forward with whispers.

'I saw them at the train station as I was coming home,' my grandfather said.

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The elephant passed: slow, graceful, enchanted by the food in the young man's hand.

'No one will ever believe this,' I said.

My grandfather looked at me like he'd never seen me before. 'You must be joking,' he said.

'Look around. Think for a moment – do you think anybody would understand? Do you think it will matter to them?'

Later that year, we would read about how some soldiers had found an elephant near death at the site of an abandoned circus; about how, despite everything, despite closure and bankruptcy, the zoo director had said, 'Bring him in – eventually the kids will see him.' The newspapers ran a picture of him, standing stark-ribbed in his new pen at the zoo, an advert of better times to come, hope for the future and the end of the war.

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Copyright Acknowledgements:

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Question 1f	© *Waking The Baby Mammoth*; National Geographic; 12 April 2009. © *Biochemical Soul*; http://biochemicalsoul.com/tag/waking-the-baby-mammoth/
Questions 2 & 3	© Téa Obreht; *The Tigers Wife*; Weidenfeld & Nicolson; 2011.

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