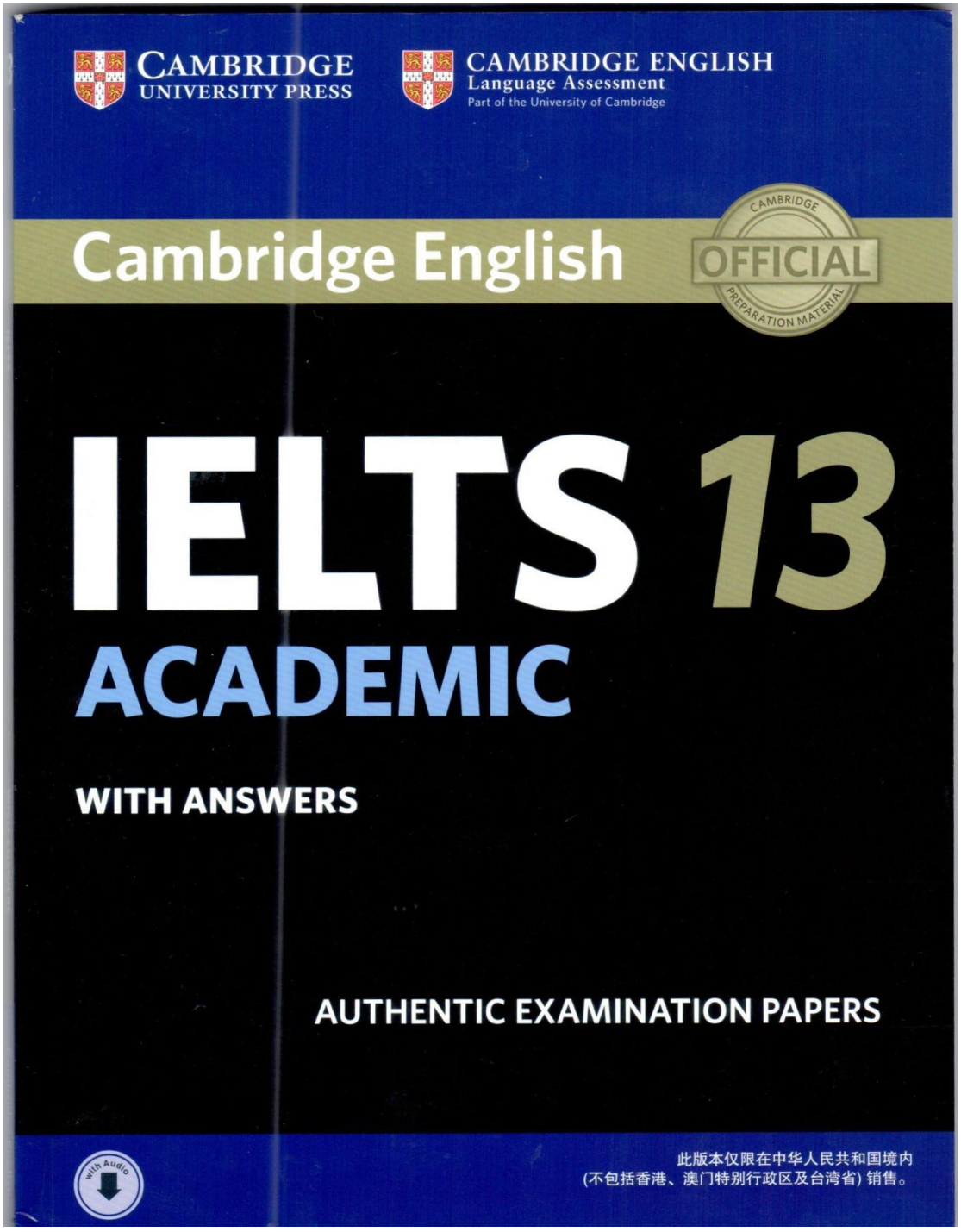

CAMBRIDGE UNIVERSITY PRESS
CAMBRIDGE ENGLISH Language Assessment
Part of the University of Cambridge
Cambridge English
CAMBRIDGE OFFICIAL PREPARATION MATERIAL
IELTS 13
ACADEMIC
WITH ANSWERS
AUTHENTIC EXAMINATION PAPERS
with Audio
此版本仅限在中华人民共和国境内
(不包括香港、澳门特别行政区及台湾省) 销售。

CAMBRIDGE UNIVERSITY PRESS
CAMBRIDGE ENGLISH Language Assessment
Part of the University of Cambridge

Cambridge English



IELTS 13

ACADEMIC

WITH ANSWERS

AUTHENTIC EXAMINATION PAPERS

Contents

Introduction 4

Test 1 10

Test 2 32

Test 3 54

Test 4 76

Audioscripts 97

Listening and Reading Answer Keys 118

Sample answers for Writing tasks 126

Sample answer sheets 136

Acknowledgements 140

Introduction

The International English Language Testing System (IELTS) is widely recognised as a reliable means of assessing the language ability of candidates who need to study or work where English is the language of communication. These Practice Tests are designed to give future IELTS candidates an idea of whether their English is at the required level.

IELTS is owned by three partners: Cambridge English Language Assessment, part of the University of Cambridge; the British Council; IDP Education Pty Limited (through its subsidiary company, IELTS Australia Pty Limited). Further information on IELTS can be found on the IELTS website www.ielts.org.

WHAT IS THE TEST FORMAT?

IELTS consists of four components. All candidates take the same Listening and Speaking tests. There is a choice of Reading and Writing tests according to whether a candidate is taking the Academic or General Training module.

Academic	**General Training**
For candidates wishing to study at undergraduate or postgraduate levels, and for those seeking professional registration.	For candidates wishing to migrate to an English-speaking country (Australia, Canada, New Zealand, UK), and for those wishing to train or study at below degree level.

The test components are taken in the following order:

Listening 4 sections, 40 items, approximately 30 minutes		
Academic Reading 3 sections, 40 items 60 minutes	or	**General Training Reading** 3 sections, 40 items 60 minutes
Academic Writing 2 tasks 60 minutes	or	**General Training Writing** 2 tasks 60 minutes
Speaking 11 to 14 minutes		
Total Test Time 2 hours 44 minutes		

ACADEMIC TEST FORMAT

Listening

This test consists of four sections, each with ten questions. The first two sections are concerned with social needs. The first section is a conversation between two speakers and the second section is a monologue. The final two sections are concerned with situations related to educational or training contexts. The third section is a conversation between up to four people and the fourth section is a monologue.

A variety of question types is used, including: multiple choice, matching, plan/map/diagram labelling, form completion, note completion, table completion, flow-chart completion, summary completion, sentence completion and short-answer questions.

Candidates hear the recording once only and answer the questions as they listen. Ten minutes are allowed at the end for candidates to transfer their answers to the answer sheet.

Reading

This test consists of three sections with 40 questions. There are three texts, which are taken from journals, books, magazines and newspapers. The texts are on topics of general interest. At least one text contains detailed logical argument.

A variety of question types is used, including: multiple choice, identifying information (True/False/Not Given), identifying the writer's views/claims (Yes/No/Not Given), matching information, matching headings, matching features, matching sentence endings, sentence completion, summary completion, note completion, table completion, flow-chart completion, diagram label completion and short-answer questions.

Writing

This test consists of two tasks. It is suggested that candidates spend about 20 minutes on Task 1, which requires them to write at least 150 words, and 40 minutes on Task 2, which requires them to write at least 250 words. Task 2 contributes twice as much as Task 1 to the Writing score.

Task 1 requires candidates to look at a diagram or some data (in a graph, table or chart) and to present the information in their own words. They are assessed on their ability to organise, present and possibly compare data, and are required to describe the stages of a process, describe an object or event, or explain how something works.

In Task 2, candidates are presented with a point of view, argument or problem. They are assessed on their ability to present a solution to the problem, present and justify an opinion, compare and contrast evidence and opinions, and to evaluate and challenge ideas, evidence or arguments.

Candidates are also assessed on their ability to write in an appropriate style. More information on assessing the Writing test, including Writing assessment criteria (public version), is available on the IELTS website.

HOW IS IELTS SCORED?

IELTS results are reported on a nine-band scale. In addition to the score for overall language ability, IELTS provides a score in the form of a profile for each of the four skills (Listening, Reading, Writing and Speaking). These scores are also reported on a nine-band scale. All scores are recorded on the Test Report Form along with details of the candidate's nationality, first language and date of birth. Each Overall Band Score corresponds to a descriptive statement which gives a summary of the English language ability of a candidate classified at that level. The nine bands and their descriptive statements are as follows:

9 ***Expert User*** *– Has fully operational command of the language: appropriate, accurate and fluent with complete understanding.*

8 ***Very Good User*** *– Has fully operational command of the language with only occasional unsystematic inaccuracies and inappropriacies. Misunderstandings may occur in unfamiliar situations. Handles complex detailed argumentation well.*

7 ***Good User*** *– Has operational command of the language, though with occasional inaccuracies, inappropriacies and misunderstandings in some situations. Generally handles complex language well and understands detailed reasoning.*

6 ***Competent User*** *– Has generally effective command of the language despite some inaccuracies, inappropriacies and misunderstandings. Can use and understand fairly complex language, particularly in familiar situations.*

5 ***Modest User*** *– Has partial command of the language, coping with overall meaning in most situations, though is likely to make many mistakes. Should be able to handle basic communication in own field.*

4 ***Limited User*** *– Basic competence is limited to familiar situations. Has frequent problems in understanding and expression. Is not able to use complex language.*

3 ***Extremely Limited User*** *– Conveys and understands only general meaning in very familiar situations. Frequent breakdowns in communication occur.*

2 ***Intermittent User*** *– No real communication is possible except for the most basic information using isolated words or short formulae in familiar situations and to meet immediate needs. Has great difficulty understanding spoken and written English.*

1 ***Non User*** *– Essentially has no ability to use the language beyond possibly a few isolated words.*

0 ***Did not attempt the test*** *– No assessable information provided.*

MARKING THE PRACTICE TESTS

Listening and Reading

The Answer Keys are on pages 118–125.
Each question in the Listening and Reading tests is worth one mark.

Questions which require letter / Roman numeral answers

- For questions where the answers are letters or Roman numerals, you should write *only* the number of answers required. For example, if the answer is a single letter or numeral you should write only one answer. If you have written more letters or numerals than are required, the answer must be marked wrong.

Questions which require answers in the form of words or numbers

- Answers may be written in upper or lower case.
- Words in brackets are *optional* – they are correct, but not necessary.
- Alternative answers are separated by a slash (/).
- If you are asked to write an answer using a certain number of words and/or (a) number(s), you will be penalised if you exceed this. For example, if a question specifies an answer using NO MORE THAN THREE WORDS and the correct answer is 'black leather coat', the answer 'coat of black leather' is *incorrect*.
- In questions where you are expected to complete a gap, you should only transfer the necessary missing word(s) onto the answer sheet. For example, to complete 'in the ...', where the correct answer is 'morning', the answer 'in the morning' would be *incorrect*.
- All answers require correct spelling (including words in brackets).
- Both US and UK spelling are acceptable and are included in the Answer Key.
- All standard alternatives for numbers, dates and currencies are acceptable.
- All standard abbreviations are acceptable.
- You will find additional notes about individual answers in the Answer Key.

Writing

The sample answers are on pages 126–135. It is not possible for you to give yourself a mark for the Writing tasks. We have provided sample answers (written by candidates), showing their score and the examiner's comments. These sample answers will give you an insight into what is required for the Writing test.

HOW SHOULD YOU INTERPRET YOUR SCORES?

At the end of each Listening and Reading Answer Key you will find a chart which will help you assess whether, on the basis of your Practice Test results, you are ready to take the IELTS test.

In interpreting your score, there are a number of points you should bear in mind. Your performance in the real IELTS test will be reported in two ways: there will be a Band Score from 1 to 9 for each of the components and an Overall Band Score from 1 to 9, which is the average of your scores in the four components. However, institutions considering your application are advised to look at both the Overall Band Score and the Bands for each component in order to determine whether you have the language skills needed for a particular course of study. For example, if your course involves a lot of reading and writing, but no lectures, listening skills might be less important and a score of 5 in Listening might be acceptable if the Overall Band Score was 7. However, for a course which has lots of lectures and spoken instructions, a score of 5 in Listening might be unacceptable even though the Overall Band Score was 7.

Once you have marked your tests, you should have some idea of whether your listening and reading skills are good enough for you to try the IELTS test. If you did well enough in one component, but not in others, you will have to decide for yourself whether you are ready to take the test.

The Practice Tests have been checked to ensure that they are of approximately the same level of difficulty as the real IELTS test. However, we cannot guarantee that your score in the Practice Tests will be reflected in the real IELTS test. The Practice Tests can only give you an idea of your possible future performance and it is ultimately up to you to make decisions based on your score.

Different institutions accept different IELTS scores for different types of courses. We have based our recommendations on the average scores which the majority of institutions accept. The institution to which you are applying may, of course, require a higher or lower score than most other institutions.

Further information

For more information about IELTS or any other Cambridge English Language Assessment examination, write to:

Cambridge English Language Assessment
1 Hills Road
Cambridge
CB1 2EU
United Kingdom

https://support.cambridgeenglish.org
http://www.ielts.org

Test 1

LISTENING

SECTION 1 *Questions 1–10*

Complete the table below.

*Write **ONE WORD AND/OR A NUMBER** for each answer.*

COOKERY CLASSES

Cookery Class	Focus	Other Information
Example The Food *Studio*	how to **1** ..... and cook with seasonal products	• small classes • also offers **2** ..... classes • clients who return get a **3** ..... discount
Bond's Cookery School	food that is **4**	• includes recipes to strengthen your **5** ..... • they have a free **6** ..... every Thursday
The **7** ..... Centre	mainly **8** ..... food	• located near the **9** ..... • a special course in skills with a **10** ..... is sometimes available

SECTION 2 *Questions 11–20*

Questions 11–13

Choose the correct letter, ***A****,* ***B*** *or* ***C****.*

Traffic Changes in Granford

11 Why are changes needed to traffic systems in Granford?

A The number of traffic accidents has risen.
B The amount of traffic on the roads has increased.
C The types of vehicles on the roads have changed.

12 In a survey, local residents particularly complained about

A dangerous driving by parents.
B pollution from trucks and lorries.
C inconvenience from parked cars.

13 According to the speaker, one problem with the new regulations will be

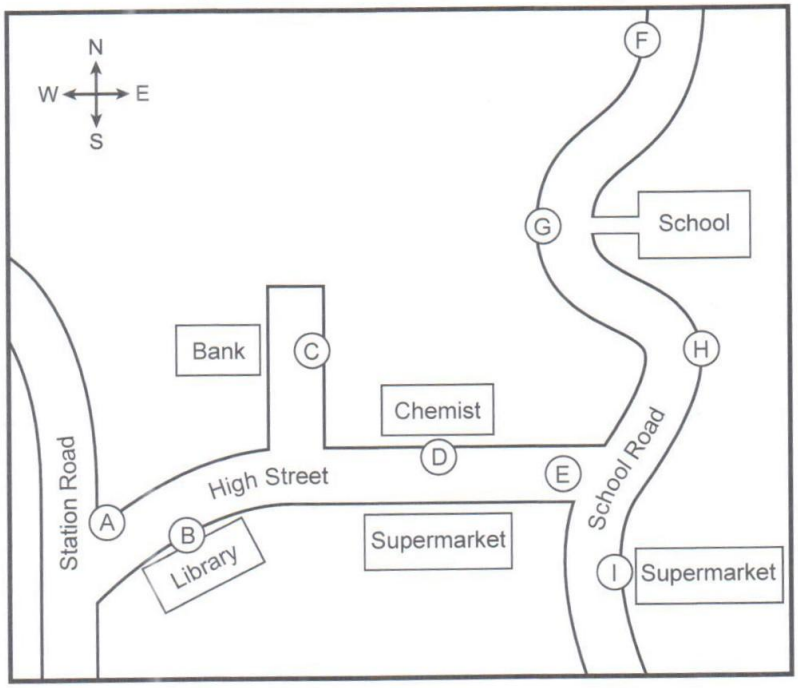
A raising money to pay for them.
B finding a way to make people follow them.
C getting the support of the police.

Questions 14–20

Label the map below.

Write the correct letter, ***A–I****, next to Questions 14–20.*

Proposed traffic changes in Granford



14 New traffic lights .....

15 Pedestrian crossing .....

16 Parking allowed .....

17 New 'No Parking' sign .....

18 New disabled parking spaces .....

19 Widened pavement .....

20 Lorry loading/unloading restrictions .....

SECTION 3 *Questions 21–30*

Questions 21–25

*Choose the correct letter, **A**, **B** or **C**.*

21 Why is Jack interested in investigating seed germination?

A He may do a module on a related topic later on.
B He wants to have a career in plant science.
C He is thinking of choosing this topic for his dissertation.

22 Jack and Emma agree the main advantage of their present experiment is that it can be

A described very easily.
B carried out inside the laboratory.
C completed in the time available.

23 What do they decide to check with their tutor?

A whether their aim is appropriate
B whether anyone else has chosen this topic
C whether the assignment contributes to their final grade

24 They agree that Graves' book on seed germination is disappointing because

A it fails to cover recent advances in seed science.
B the content is irrelevant for them.
C its focus is very theoretical.

25 What does Jack say about the article on seed germination by Lee Hall?

A The diagrams of plant development are useful.
B The analysis of seed germination statistics is thorough.
C The findings on seed germination after fires are surprising.

Questions 26–30

Complete the flow-chart below.

*Choose **FIVE** answers from the box and write the correct letter, **A–H**, next to Questions 26–30.*

A	container	**B**	soil	**C**	weight	**D**	condition
E	height	**F**	colour	**G**	types	**H**	depths

Stages in the experiment

Select seeds of different **26** ..... and sizes.

↓

Measure and record the **27** ..... and size of each one.

↓

Decide on the **28** ..... to be used.

↓

Use a different **29** ..... for each seed and label it.

↓

After about 3 weeks, record the plant's **30** ..... .

↓

Investigate the findings.

SECTION 4 *Questions 31–40*

Complete the notes below.

*Write **ONE WORD ONLY** for each answer.*

Effects of urban environments on animals

Introduction

Recent urban developments represent massive environmental changes. It was previously thought that only a few animals were suitable for city life, e.g.

- the **31** ..... – because of its general adaptability
- the pigeon – because walls of city buildings are similar to **32** .....

In fact, many urban animals are adapting with unusual **33** ..... .

Recent research

- Emilie Snell-Rood studied small urbanised mammal specimens from museums in Minnesota.
  - She found the size of their **34** ..... had increased.
  - She suggests this may be due to the need to locate new sources of **35** ..... and to deal with new dangers.
- Catarina Miranda focused on the **36** ..... of urban and rural blackbirds.
  - She found urban birds were often braver, but were afraid of situations that were **37** ..... .
- Jonathan Atwell studies how animals respond to urban environments.
  - He found that some animals respond to **38** ..... by producing lower levels of hormones.
- Sarah Partan's team found urban squirrels use their **39** ..... to help them communicate.

Long-term possibilities

Species of animals may develop which are unique to cities. However, some changes may not be **40** ..... .

READING

READING PASSAGE 1

*You should spend about 20 minutes on **Questions 1–13**, which are based on Reading Passage 1 below.*

Case Study: *Tourism New Zealand* website

New Zealand is a small country of four million inhabitants, a long-haul flight from all the major tourist-generating markets of the world. Tourism currently makes up 9% of the country's gross domestic product, and is the country's largest export sector. Unlike other export sectors, which make products and then sell them overseas, tourism brings its customers to New Zealand. The product is the country itself – the people, the places and the experiences. In 1999, Tourism New Zealand launched a campaign to communicate a new brand position to the world. The campaign focused on New Zealand's scenic beauty, exhilarating outdoor activities and authentic Maori culture, and it made New Zealand one of the strongest national brands in the world.

A key feature of the campaign was the website www.newzealand.com, which provided potential visitors to New Zealand with a single gateway to everything the destination had to offer. The heart of the website was a database of tourism services operators, both those based in New Zealand and those based abroad which offered tourism services to the country. Any tourism-related business could be listed by filling in a simple form. This meant that even the smallest bed and breakfast address or specialist activity provider could gain a web presence with access to an audience of long-haul visitors. In addition, because participating businesses were able to update the details they gave on a regular basis, the information provided remained accurate. And to maintain and improve standards, Tourism New Zealand organised a scheme whereby organisations appearing on the website underwent an independent evaluation against a set of agreed national standards of quality. As part of this, the effect of each business on the environment was considered.

To communicate the New Zealand experience, the site also carried features relating to famous people and places. One of the most popular was an interview with former New Zealand All Blacks rugby captain Tana Umaga. Another feature that attracted a lot of attention was an interactive journey through a number of the locations chosen for blockbuster films which had made use of New Zealand's stunning scenery as a backdrop. As the site developed, additional features were added to help independent travellers devise their own customised itineraries. To make it easier to plan motoring holidays, the site catalogued the most popular driving routes in the country, highlighting different routes according to the season and indicating distances and times.

Later, a Travel Planner feature was added, which allowed visitors to click and 'bookmark' places or attractions they were interested in, and then view the results on a map. The Travel Planner offered suggested routes and public transport options between the chosen locations. There were also links to accommodation in the area. By registering with the website, users could save their Travel Plan and return to it later, or print it out to take on the visit. The website also had a 'Your Words' section where anyone could submit a blog of their New Zealand travels for possible inclusion on the website.

The Tourism New Zealand website won two Webby awards for online achievement and innovation. More importantly perhaps, the growth of tourism to New Zealand was impressive. Overall tourism expenditure increased by an average of 6.9% per year between 1999 and 2004. From Britain, visits to New Zealand grew at an average annual rate of 13% between 2002 and 2006, compared to a rate of 4% overall for British visits abroad.

The website was set up to allow both individuals and travel organisations to create itineraries and travel packages to suit their own needs and interests. On the website, visitors can search for activities not solely by geographical location, but also by the particular nature of the activity. This is important as research shows that activities are the key driver of visitor satisfaction, contributing 74% to visitor satisfaction, while transport and accommodation account for the remaining 26%. The more activities that visitors undertake, the more satisfied they will be. It has also been found that visitors enjoy cultural activities most when they are interactive, such as visiting a *marae* (meeting ground) to learn about traditional Maori life. Many long-haul travellers enjoy such learning experiences, which provide them with stories to take home to their friends and family. In addition, it appears that visitors to New Zealand don't want to be 'one of the crowd' and find activities that involve only a few people more special and meaningful.

It could be argued that New Zealand is not a typical destination. New Zealand is a small country with a visitor economy composed mainly of small businesses. It is generally perceived as a safe English-speaking country with a reliable transport infrastructure. Because of the long-haul flight, most visitors stay for longer (average 20 days) and want to see as much of the country as possible on what is often seen as a once-in-a-lifetime visit. However, the underlying lessons apply anywhere – the effectiveness of a strong brand, a strategy based on unique experiences and a comprehensive and user-friendly website.

Questions 1–7

Complete the table below.

*Choose **ONE WORD ONLY** from the passage for each answer.*

Write your answers in boxes 1–7 on your answer sheet.

Section of website	Comments
Database of tourism services	• easy for tourism-related businesses to get on the list • allowed businesses to **1** ..... information regularly • provided a country-wide evaluation of businesses, including their impact on the **2** .....
Special features on local topics	• e.g. an interview with a former sports **3** ..... , and an interactive tour of various locations used in **4** .....
Information on driving routes	• varied depending on the **5** .....
Travel Planner	• included a map showing selected places, details of public transport and local **6** .....
'Your Words'	• travellers could send a link to their **7** .....

Questions 8–13

Do the following statements agree with the information given in Reading Passage 1?

In boxes 8–13 on your answer sheet, write

TRUE	*if the statement agrees with the information*
FALSE	*if the statement contradicts the information*
NOT GIVEN	*if there is no information on this*

8 The website www.newzealand.com aimed to provide ready-made itineraries and packages for travel companies and individual tourists.

9 It was found that most visitors started searching on the website by geographical location.

10 According to research, 26% of visitor satisfaction is related to their accommodation.

11 Visitors to New Zealand like to become involved in the local culture.

12 Visitors like staying in small hotels in New Zealand rather than in larger ones.

13 Many visitors feel it is unlikely that they will return to New Zealand after their visit.

READING PASSAGE 2

*You should spend about 20 minutes on **Questions 14–26**, which are based on Reading Passage 2 on pages 21 and 22.*

Questions 14–19

Reading Passage 2 has six paragraphs, **A–F**.

Choose the correct heading for each paragraph from the list of headings below.

*Write the correct number, **i–viii**, in boxes 14–19 on your answer sheet.*

List of Headings

i	The productive outcomes that may result from boredom
ii	What teachers can do to prevent boredom
iii	A new explanation and a new cure for boredom
iv	Problems with a scientific approach to boredom
v	A potential danger arising from boredom
vi	Creating a system of classification for feelings of boredom
vii	Age groups most affected by boredom
viii	Identifying those most affected by boredom

14 Paragraph **A**

15 Paragraph **B**

16 Paragraph **C**

17 Paragraph **D**

18 Paragraph **E**

19 Paragraph **F**

Why being bored is stimulating – and useful, too

This most common of emotions is turning out to be more interesting than we thought

A We all know how it feels – it's impossible to keep your mind on anything, time stretches out, and all the things you could do seem equally unlikely to make you feel better. But defining boredom so that it can be studied in the lab has proved difficult. For a start, it can include a lot of other mental states, such as frustration, apathy, depression and indifference. There isn't even agreement over whether boredom is always a low-energy, flat kind of emotion or whether feeling agitated and restless counts as boredom, too. In his book, *Boredom: A Lively History*, Peter Toohey at the University of Calgary, Canada, compares it to disgust – an emotion that motivates us to stay away from certain situations. 'If disgust protects humans from infection, boredom may protect them from "infectious" social situations,' he suggests.

B By asking people about their experiences of boredom, Thomas Goetz and his team at the University of Konstanz in Germany have recently identified five distinct types: indifferent, calibrating, searching, reactant and apathetic. These can be plotted on two axes – one running left to right, which measures low to high arousal, and the other from top to bottom, which measures how positive or negative the feeling is. Intriguingly, Goetz has found that while people experience all kinds of boredom, they tend to specialise in one. Of the five types, the most damaging is 'reactant' boredom with its explosive combination of high arousal and negative emotion. The most useful is what Goetz calls 'indifferent' boredom: someone isn't engaged in anything satisfying but still feels relaxed and calm. However, it remains to be seen whether there are any character traits that predict the kind of boredom each of us might be prone to.

C Psychologist Sandi Mann at the University of Central Lancashire, UK, goes further. 'All emotions are there for a reason, including boredom,' she says. Mann has found that being bored makes us more creative. 'We're all afraid of being bored but in actual fact it can lead to all kinds of amazing things,' she says. In experiments published last year, Mann found that people who had been made to feel bored by copying numbers out of the phone book for 15 minutes came up with more creative ideas about how to use a polystyrene cup than a control group. Mann concluded that a passive, boring activity is best for creativity because it allows the mind to wander. In fact, she goes so far as to suggest that we should seek out more boredom in our lives.

D Psychologist John Eastwood at York University in Toronto, Canada, isn't convinced. 'If you are in a state of mind-wandering you are not bored,' he says. 'In my view, by definition boredom is an undesirable state.' That doesn't necessarily mean that it isn't adaptive, he adds. 'Pain is adaptive – if we didn't have physical pain, bad things would happen to us. Does that mean that we should actively cause pain? No. But even if boredom has evolved to help us survive, it can still be toxic

if allowed to fester.' For Eastwood, the central feature of boredom is a failure to put our 'attention system' into gear. This causes an inability to focus on anything, which makes time seem to go painfully slowly. What's more, your efforts to improve the situation can end up making you feel worse. 'People try to connect with the world and if they are not successful there's that frustration and irritability,' he says. Perhaps most worryingly, says Eastwood, repeatedly failing to engage attention can lead to a state where we don't know what to do any more, and no longer care.

E Eastwood's team is now trying to explore why the attention system fails. It's early days but they think that at least some of it comes down to personality. Boredom proneness has been linked with a variety of traits. People who are motivated by pleasure seem to suffer particularly badly. Other personality traits, such as curiosity, are associated with a high boredom threshold. More evidence that boredom has detrimental effects comes from studies of people who are more or less prone to boredom. It seems those who bore easily face poorer prospects in education, their career and even life in general. But of course, boredom itself cannot kill – it's the things we do to deal with it that may put us in danger. What can we do to alleviate it before it comes to that? Goetz's group has one suggestion. Working with teenagers, they found that those who 'approach' a boring situation – in other words, see that it's boring and get stuck in anyway – report less boredom than those who try to avoid it by using snacks, TV or social media for distraction.

F Psychologist Francoise Wemelsfelder speculates that our over-connected lifestyles might even be a new source of boredom. 'In modern human society there is a lot of overstimulation but still a lot of problems finding meaning,' she says. So instead of seeking yet more mental stimulation, perhaps we should leave our phones alone, and use boredom to motivate us to engage with the world in a more meaningful way.

Questions 20–23

Look at the following people (Questions 20–23) and the list of ideas below.

Match each person with the correct idea, ***A–E****.*

Write the correct letter, ***A–E****, in boxes 20–23 on your answer sheet.*

20 Peter Toohey

21 Thomas Goetz

22 John Eastwood

23 Francoise Wemelsfelder

List of Ideas

A The way we live today may encourage boredom.

B One sort of boredom is worse than all the others.

C Levels of boredom may fall in the future.

D Trying to cope with boredom can increase its negative effects.

E Boredom may encourage us to avoid an unpleasant experience.

Questions 24–26

Complete the summary below.

Choose ***ONE WORD ONLY*** *from the passage for each answer.*

Write your answers in boxes 24–26 on your answer sheet.

Responses to boredom

For John Eastwood, the central feature of boredom is that people cannot **24** ..... , due to a failure in what he calls the 'attention system', and as a result they become frustrated and irritable. His team suggests that those for whom **25** ..... is an important aim in life may have problems in coping with boredom, whereas those who have the characteristic of **26** ..... can generally cope with it.

READING PASSAGE 3

*You should spend about 20 minutes on **Questions 27–40**, which are based on Reading Passage 3 below.*

Artificial artists

Can computers really create works of art?

The Painting Fool is one of a growing number of computer programs which, so their makers claim, possess creative talents. Classical music by an artificial composer has had audiences enraptured, and even tricked them into believing a human was behind the score. Artworks painted by a robot have sold for thousands of dollars and been hung in prestigious galleries. And software has been built which creates art that could not have been imagined by the programmer.

Human beings are the only species to perform sophisticated creative acts regularly. If we can break this process down into computer code, where does that leave human creativity? 'This is a question at the very core of humanity,' says Geraint Wiggins, a computational creativity researcher at Goldsmiths, University of London. 'It scares a lot of people. They are worried that it is taking something special away from what it means to be human.'

To some extent, we are all familiar with computerised art. The question is: where does the work of the artist stop and the creativity of the computer begin? Consider one of the oldest machine artists, Aaron, a robot that has had paintings exhibited in London's Tate Modern and the San Francisco Museum of Modern Art. Aaron can pick up a paintbrush and paint on canvas on its own. Impressive perhaps, but it is still little more than a tool to realise the programmer's own creative ideas.

Simon Colton, the designer of the Painting Fool, is keen to make sure his creation doesn't attract the same criticism. Unlike earlier 'artists' such as Aaron, the Painting Fool only needs minimal direction and can come up with its own concepts by going online for material. The software runs its own web searches and trawls through social media sites. It is now beginning to display a kind of imagination too, creating pictures from scratch. One of its original works is a series of fuzzy landscapes, depicting trees and sky. While some might say they have a mechanical look, Colton argues that such reactions arise from people's double standards towards software-produced and human-produced art. After all, he says, consider that the Painting Fool painted the landscapes without referring to a photo. 'If a child painted a new scene from its head, you'd say it has a certain level of imagination,' he points out. 'The same should be true of a machine.' Software bugs can also lead to unexpected results. Some of the Painting Fool's paintings of a chair came out in black and white, thanks to a technical glitch. This gives the work an eerie, ghostlike quality. Human artists like the renowned Ellsworth Kelly are lauded for limiting their colour palette – so why should computers be any different?

Researchers like Colton don't believe it is right to measure machine creativity directly to that of humans who 'have had millennia to develop our skills'. Others, though, are fascinated by the prospect that a computer might create something as original and subtle as our best artists. So far, only one has come close. Composer David Cope invented a program called Experiments in Musical Intelligence, or EMI. Not only did EMI create compositions in Cope's style, but also that of the most revered classical composers, including Bach, Chopin and Mozart. Audiences were moved to tears, and EMI even fooled classical music experts into thinking they were hearing genuine Bach. Not everyone was impressed however. Some, such as Wiggins, have blasted Cope's work as pseudoscience, and condemned him for his deliberately vague explanation of how the software worked. Meanwhile, Douglas Hofstadter of Indiana University said EMI created replicas which still rely completely on the original artist's creative impulses. When audiences found out the truth they were often outraged with Cope, and one music lover even tried to punch him. Amid such controversy, Cope destroyed EMI's vital databases.

But why did so many people love the music, yet recoil when they discovered how it was composed? A study by computer scientist David Moffat of Glasgow Caledonian University provides a clue. He asked both expert musicians and non-experts to assess six compositions. The participants weren't told beforehand whether the tunes were composed by humans or computers, but were asked to guess, and then rate how much they liked each one. People who thought the composer was a computer tended to dislike the piece more than those who believed it was human. This was true even among the experts, who might have been expected to be more objective in their analyses.

Where does this prejudice come from? Paul Bloom of Yale University has a suggestion: he reckons part of the pleasure we get from art stems from the creative process behind the work. This can give it an 'irresistible essence', says Bloom. Meanwhile, experiments by Justin Kruger of New York University have shown that people's enjoyment of an artwork increases if they think more time and effort was needed to create it. Similarly, Colton thinks that when people experience art, they wonder what the artist might have been thinking or what the artist is trying to tell them. It seems obvious, therefore, that with computers producing art, this speculation is cut short – there's nothing to explore. But as technology becomes increasingly complex, finding those greater depths in computer art could become possible. This is precisely why Colton asks the Painting Fool to tap into online social networks for its inspiration: hopefully this way it will choose themes that will already be meaningful to us.

Questions 27–31

*Choose the correct letter, **A**, **B**, **C** or **D**.*

Write the correct letter in boxes 27–31 on your answer sheet.

27 What is the writer suggesting about computer-produced works in the first paragraph?

- **A** People's acceptance of them can vary considerably.
- **B** A great deal of progress has already been attained in this field.
- **C** They have had more success in some artistic genres than in others.
- **D** The advances are not as significant as the public believes them to be.

28 According to Geraint Wiggins, why are many people worried by computer art?

- **A** It is aesthetically inferior to human art.
- **B** It may ultimately supersede human art.
- **C** It undermines a fundamental human quality.
- **D** It will lead to a deterioration in human ability.

29 What is a key difference between Aaron and the Painting Fool?

- **A** its programmer's background
- **B** public response to its work
- **C** the source of its subject matter
- **D** the technical standard of its output

30 What point does Simon Colton make in the fourth paragraph?

- **A** Software-produced art is often dismissed as childish and simplistic.
- **B** The same concepts of creativity should not be applied to all forms of art.
- **C** It is unreasonable to expect a machine to be as imaginative as a human being.
- **D** People tend to judge computer art and human art according to different criteria.

31 The writer refers to the paintings of a chair as an example of computer art which

- **A** achieves a particularly striking effect.
- **B** exhibits a certain level of genuine artistic skill.
- **C** closely resembles that of a well-known artist.
- **D** highlights the technical limitations of the software.

Questions 32–37

*Complete each sentence with the correct ending, **A–G** below.*

*Write the correct letter, **A–G**, in boxes 32–37 on your answer sheet.*

32 Simon Colton says it is important to consider the long-term view when

33 David Cope's EMI software surprised people by

34 Geraint Wiggins criticised Cope for not

35 Douglas Hofstadter claimed that EMI was

36 Audiences who had listened to EMI's music became angry after

37 The participants in David Moffat's study had to assess music without

List of Ideas

A generating work that was virtually indistinguishable from that of humans.

B knowing whether it was the work of humans or software.

C producing work entirely dependent on the imagination of its creator.

D comparing the artistic achievements of humans and computers.

E revealing the technical details of his program.

F persuading the public to appreciate computer art.

G discovering that it was the product of a computer program.

Questions 38–40

Do the following statements agree with the claims of the writer in Reading Passage 3?

In boxes 38–40 on your answer sheet, write

YES	*if the statement agrees with the claims of the writer*
NO	*if the statement contradicts the claims of the writer*
NOT GIVEN	*if it is impossible to say what the writer thinks about this*

38 Moffat's research may help explain people's reactions to EMI.

39 The non-experts in Moffat's study all responded in a predictable way.

40 Justin Kruger's findings cast doubt on Paul Bloom's theory about people's prejudice towards computer art.

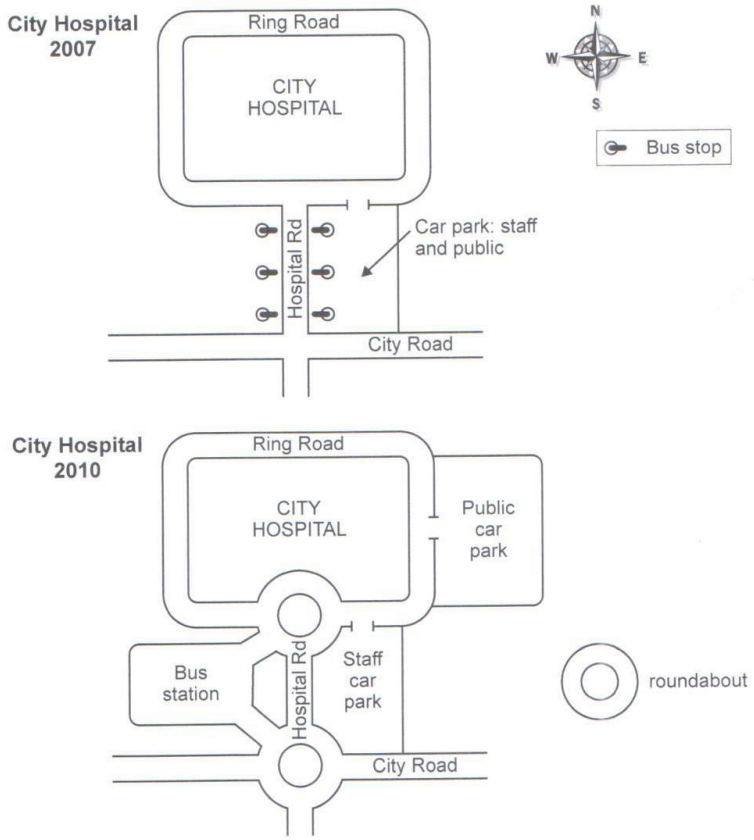
WRITING

WRITING TASK 1

You should spend about 20 minutes on this task.

> ***The two maps below show road access to a city hospital in 2007 and in 2010.***
>
> ***Summarise the information by selecting and reporting the main features, and make comparisons where relevant.***

Write at least 150 words.



WRITING TASK 2

You should spend about 40 minutes on this task.

Write about the following topic:

> ***Living in a country where you have to speak a foreign language can cause serious social problems, as well as practical problems.***
>
> ***To what extent do you agree or disagree with this statement?***

Give reasons for your answer and include any relevant examples from your own knowledge or experience.

Write at least 250 words.

SPEAKING

PART 1

The examiner asks the candidate about him/herself, his/her home, work or studies and other familiar topics.

EXAMPLE

Television programmes

- Where do you usually watch TV programmes/shows? [Why?/Why not?]
- What's your favourite TV programme/show? [Why?]
- Are there any programmes/shows you don't like watching? [Why?/Why not?]
- Do you think you will watch more TV or fewer TV programmes/shows in the future? [Why?/Why not?]

PART 2

Describe someone you know who has started a business.

You should say:
who this person is
what work this person does
why this person decided to start a business
and explain whether you would like to do the same kind of work as this person.

You will have to talk about the topic for one to two minutes. You have one minute to think about what you are going to say. You can make some notes to help you if you wish.

PART 3

Discussion topics:

Choosing work

Example questions:
What kinds of jobs do young people not want to do in your country?
Who is best at advising young people about choosing a job: teachers or parents?
Is money always the most important thing when choosing a job?

Work–Life balance

Example questions:
Do you agree that many people nowadays are under pressure to work longer hours and take less holiday?
What is the impact on society of people having a poor work–life balance?
Could you recommend some effective strategies for governments and employers to ensure people have a good work–life balance?

Test 2

LISTENING

SECTION 1 *Questions 1–10*

Complete the notes below.

*Write **ONE WORD AND/OR A NUMBER** for each answer.*

South City Cycling Club

Example
Name of club secretary: Jim ..*Hunter*..

Membership

- Full membership costs $260; this covers cycling and **1** ..... all over Australia
- Recreational membership costs $108
- Cost of membership includes the club fee and **2** .....
- The club kit is made by a company called **3** .....

Training rides

- Chance to improve cycling skills and fitness
- Level B: speed about **4** ..... kph
- Weekly sessions
  - Tuesdays at 5.30 am, meet at the **5** .....
  - Thursdays at 5.30 am, meet at the entrance to the **6** .....

Further information

- Rides are about an hour and a half
- Members often have **7** ..... together afterwards
- There is not always a **8** ..... with the group on these rides
- Check and print the **9** ..... on the website beforehand
- Bikes must have **10** .....

SECTION 2 *Questions 11–20*

Questions 11–16

Choose the correct letter, ***A****,* ***B*** *or* ***C****.*

Information on company volunteering projects

11 How much time for volunteering does the company allow per employee?

A two hours per week
B one day per month
C 8 hours per year

12 In feedback almost all employees said that volunteering improved their

A chances of promotion.
B job satisfaction.
C relationships with colleagues.

13 Last year some staff helped unemployed people with their

A literacy skills.
B job applications.
C communication skills.

14 This year the company will start a new volunteering project with a local

A school.
B park.
C charity.

15 Where will the Digital Inclusion Day be held?

A at the company's training facility
B at a college
C in a community centre

16 What should staff do if they want to take part in the Digital Inclusion Day?

A fill in a form
B attend a training workshop
C get permission from their manager

Questions 17 and 18

*Choose **TWO** letters, **A–E**.*

What **TWO** things are mentioned about the participants on the last Digital Inclusion Day?

A They were all over 70.
B They never used their computer.
C Their phones were mostly old-fashioned.
D They only used their phones for making calls.
E They initially showed little interest.

Questions 19 and 20

*Choose **TWO** letters, **A–E**.*

What **TWO** activities on the last Digital Inclusion Day did participants describe as useful?

A learning to use tablets
B communicating with family
C shopping online
D playing online games
E sending emails

SECTION 3 *Questions 21–30*

Questions 21–25

Choose the correct letter, ***A****,* ***B*** *or* ***C****.*

Planning a presentation on nanotechnology

21 Russ says that his difficulty in planning the presentation is due to

A his lack of knowledge about the topic.
B his uncertainty about what he should try to achieve.
C the short time that he has for preparation.

22 Russ and his tutor agree that his approach in the presentation will be

A to concentrate on how nanotechnology is used in one field.
B to follow the chronological development of nanotechnology.
C to show the range of applications of nanotechnology.

23 In connection with slides, the tutor advises Russ to

A talk about things that he can find slides to illustrate.
B look for slides to illustrate the points he makes.
C consider omitting slides altogether.

24 They both agree that the best way for Russ to start his presentation is

A to encourage the audience to talk.
B to explain what Russ intends to do.
C to provide an example.

25 What does the tutor advise Russ to do next while preparing his presentation?

A summarise the main point he wants to make
B read the notes he has already made
C list the topics he wants to cover

Questions 26–30

What comments do the speakers make about each of the following aspects of Russ's previous presentation?

*Choose **FIVE** answers from the box and write the correct letter, **A–G**, next to Questions 26–30.*

	Comments
A	lacked a conclusion
B	useful in the future
C	not enough
D	sometimes distracting
E	showed originality
F	covered a wide range
G	not too technical

Aspects of Russ's previous presentation

26 structure .....

27 eye contact .....

28 body language .....

29 choice of words .....

30 handouts .....

SECTION 4 *Questions 31–40*

Complete the notes below.

*Write **ONE WORD ONLY** for each answer.*

Episodic memory

- the ability to recall details, e.g. the time and **31** ..... of past events
- different to semantic memory – the ability to remember general information about the **32** ..... , which does not involve recalling **33** ..... information

Forming episodic memories involves three steps:

Encoding

- involves receiving and processing information
- the more **34** ..... given to an event, the more successfully it can be encoded
- to remember a **35** ..... , it is useful to have a strategy for encoding such information

Consolidation

- how memories are strengthened and stored
- most effective when memories can be added to a **36** ..... of related information
- the **37** ..... of retrieval affects the strength of memories

Retrieval

- memory retrieval often depends on using a prompt, e.g. the **38** ..... of an object near to the place where you left your car

Episodic memory impairments

- these affect people with a wide range of medical conditions
- games which stimulate the **39** ..... have been found to help people with schizophrenia
- children with autism may have difficulty forming episodic memories – possibly because their concept of the **40** ..... may be absent
- memory training may help autistic children develop social skills

READING

READING PASSAGE 1

*You should spend about 20 minutes on **Questions 1–13**, which are based on Reading Passage 1 below.*

Bringing cinnamon to Europe

Cinnamon is a sweet, fragrant spice produced from the inner bark of trees of the genus Cinnamomum, which is native to the Indian sub-continent. It was known in biblical times, and is mentioned in several books of the Bible, both as an ingredient that was mixed with oils for anointing people's bodies, and also as a token indicating friendship among lovers and friends. In ancient Rome, mourners attending funerals burnt cinnamon to create a pleasant scent. Most often, however, the spice found its primary use as an additive to food and drink. In the Middle Ages, Europeans who could afford the spice used it to flavour food, particularly meat, and to impress those around them with their ability to purchase an expensive condiment from the 'exotic' East. At a banquet, a host would offer guests a plate with various spices piled upon it as a sign of the wealth at his or her disposal. Cinnamon was also reported to have health benefits, and was thought to cure various ailments, such as indigestion.

Toward the end of the Middle Ages, the European middle classes began to desire the lifestyle of the elite, including their consumption of spices. This led to a growth in demand for cinnamon and other spices. At that time, cinnamon was transported by Arab merchants, who closely guarded the secret of the source of the spice from potential rivals. They took it from India, where it was grown, on camels via an overland route to the Mediterranean. Their journey ended when they reached Alexandria. European traders sailed there to purchase their supply of cinnamon, then brought it back to Venice. The spice then travelled from that great trading city to markets all around Europe. Because the overland trade route allowed for only small quantities of the spice to reach Europe, and because Venice had a virtual monopoly of the trade, the Venetians could set the price of cinnamon exorbitantly high. These prices, coupled with the increasing demand, spurred the search for new routes to Asia by Europeans eager to take part in the spice trade.

Seeking the high profits promised by the cinnamon market, Portuguese traders arrived on the island of Ceylon in the Indian Ocean toward the end of the 15th century. Before Europeans arrived on the island, the state had organized the cultivation of cinnamon. People belonging to the ethnic group called the Salagama would peel the bark off young shoots of the cinnamon plant in the rainy season, when the wet bark was more pliable. During the peeling process, they curled the bark into the 'stick' shape still associated with the spice today. The Salagama then gave the finished product to the king as a form of tribute. When the Portuguese arrived, they needed to increase

production significantly, and so enslaved many other members of the Ceylonese native population, forcing them to work in cinnamon harvesting. In 1518, the Portuguese built a fort on Ceylon, which enabled them to protect the island, so helping them to develop a monopoly in the cinnamon trade and generate very high profits. In the late 16th century, for example, they enjoyed a tenfold profit when shipping cinnamon over a journey of eight days from Ceylon to India.

When the Dutch arrived off the coast of southern Asia at the very beginning of the 17th century, they set their sights on displacing the Portuguese as kings of cinnamon. The Dutch allied themselves with Kandy, an inland kingdom on Ceylon. In return for payments of elephants and cinnamon, they protected the native king from the Portuguese. By 1640, the Dutch broke the 150-year Portuguese monopoly when they overran and occupied their factories. By 1658, they had permanently expelled the Portuguese from the island, thereby gaining control of the lucrative cinnamon trade.

In order to protect their hold on the market, the Dutch, like the Portuguese before them, treated the native inhabitants harshly. Because of the need to boost production and satisfy Europe's ever-increasing appetite for cinnamon, the Dutch began to alter the harvesting practices of the Ceylonese. Over time, the supply of cinnamon trees on the island became nearly exhausted, due to systematic stripping of the bark. Eventually, the Dutch began cultivating their own cinnamon trees to supplement the diminishing number of wild trees available for use.

Then, in 1796, the English arrived on Ceylon, thereby displacing the Dutch from their control of the cinnamon monopoly. By the middle of the 19th century, production of cinnamon reached 1,000 tons a year, after a lower grade quality of the spice became acceptable to European tastes. By that time, cinnamon was being grown in other parts of the Indian Ocean region and in the West Indies, Brazil, and Guyana. Not only was a monopoly of cinnamon becoming impossible, but the spice trade overall was diminishing in economic potential, and was eventually superseded by the rise of trade in coffee, tea, chocolate, and sugar.

Questions 1–9

Complete the notes below.

*Choose **ONE WORD ONLY** from the passage for each answer.*

Write your answers in boxes 1–9 on your answer sheet.

The Early History of Cinnamon

Biblical times:
- added to **1** .....
- used to show **2** ..... between people

Ancient Rome:
- used for its sweet smell at **3** .....

Middle Ages:
- added to food, especially meat
- was an indication of a person's **4** .....
- known as a treatment for **5** ..... and other health problems
- grown in **6** .....
- merchants used **7** ..... to bring it to the Mediterranean
- arrived in the Mediterranean at **8** .....
- traders took it to **9** ..... and sold it to destinations around Europe

Questions 10–13

Do the following statements agree with the information given in Reading Passage 1?

In boxes 10–13 on your answer sheet, write

TRUE	*if the statement agrees with the information*
FALSE	*if the statement contradicts the information*
NOT GIVEN	*if there is no information on this*

10 The Portuguese had control over the cinnamon trade in Ceylon throughout the 16th century.

11 The Dutch took over the cinnamon trade from the Portuguese as soon as they arrived in Ceylon.

12 The trees planted by the Dutch produced larger quantities of cinnamon than the wild trees.

13 The spice trade maintained its economic importance during the 19th century.

READING PASSAGE 2

*You should spend about 20 minutes on **Questions 14–26**, which are based on Reading Passage 2 below.*

Oxytocin

The positive and negative effects of the chemical known as the 'love hormone'

A Oxytocin is a chemical, a hormone produced in the pituitary gland in the brain. It was through various studies focusing on animals that scientists first became aware of the influence of oxytocin. They discovered that it helps reinforce the bonds between prairie voles, which mate for life, and triggers the motherly behaviour that sheep show towards their newborn lambs. It is also released by women in childbirth, strengthening the attachment between mother and baby. Few chemicals have as positive a reputation as oxytocin, which is sometimes referred to as the 'love hormone'. One sniff of it can, it is claimed, make a person more trusting, empathetic, generous and cooperative. It is time, however, to revise this wholly optimistic view. A new wave of studies has shown that its effects vary greatly depending on the person and the circumstances, and it can impact on our social interactions for worse as well as for better.

B Oxytocin's role in human behaviour first emerged in 2005. In a groundbreaking experiment, Markus Heinrichs and his colleagues at the University of Freiburg, Germany, asked volunteers to do an activity in which they could invest money with an anonymous person who was not guaranteed to be honest. The team found that participants who had sniffed oxytocin via a nasal spray beforehand invested more money than those who received a placebo instead. The study was the start of research into the effects of oxytocin on human interactions. 'For eight years, it was quite a lonesome field,' Heinrichs recalls. 'Now, everyone is interested.' These follow-up studies have shown that after a sniff of the hormone, people become more charitable, better at reading emotions on others' faces and at communicating constructively in arguments. Together, the results fuelled the view that oxytocin universally enhanced the positive aspects of our social nature.

C Then, after a few years, contrasting findings began to emerge. Simone Shamay-Tsoory at the University of Haifa, Israel, found that when volunteers played a competitive game, those who inhaled the hormone showed more pleasure when they beat other players, and felt more envy when others won. What's more, administering oxytocin also has sharply contrasting outcomes depending on a person's disposition. Jennifer Bartz from Mount Sinai School of Medicine, New York, found that it improves people's ability to read emotions, but only if they are not very socially adept to begin with. Her research also shows that oxytocin in fact reduces cooperation in subjects who are particularly anxious or sensitive to rejection.

D Another discovery is that oxytocin's effects vary depending on who we are interacting with. Studies conducted by Carolyn DeClerck of the University of Antwerp, Belgium, revealed that people who had received a dose of oxytocin actually became less cooperative when dealing with complete strangers. Meanwhile, Carsten De Dreu at the University of Amsterdam in the Netherlands discovered that volunteers given oxytocin showed favouritism: Dutch men became quicker to associate positive words with Dutch names than with foreign ones, for example. According to De Dreu, oxytocin drives people to care for those in their social circles and defend them from outside dangers. So, it appears that oxytocin strengthens biases, rather than promoting general goodwill, as was previously thought.

E There were signs of these subtleties from the start. Bartz has recently shown that in almost half of the existing research results, oxytocin influenced only certain individuals or in certain circumstances. Where once researchers took no notice of such findings, now a more nuanced understanding of oxytocin's effects is propelling investigations down new lines. To Bartz, the key to understanding what the hormone does lies in pinpointing its core function rather than in cataloguing its seemingly endless effects. There are several hypotheses which are not mutually exclusive. Oxytocin could help to reduce anxiety and fear. Or it could simply motivate people to seek out social connections. She believes that oxytocin acts as a chemical spotlight that shines on social clues – a shift in posture, a flicker of the eyes, a dip in the voice – making people more attuned to their social environment. This would explain why it makes us more likely to look others in the eye and improves our ability to identify emotions. But it could also make things worse for people who are overly sensitive or prone to interpreting social cues in the worst light.

F Perhaps we should not be surprised that the oxytocin story has become more perplexing. The hormone is found in everything from octopuses to sheep, and its evolutionary roots stretch back half a billion years. 'It's a very simple and ancient molecule that has been co-opted for many different functions,' says Sue Carter at the University of Illinois, Chicago, USA. 'It affects primitive parts of the brain like the amygdala, so it's going to have many effects on just about everything.' Bartz agrees. 'Oxytocin probably does some very basic things, but once you add our higher-order thinking and social situations, these basic processes could manifest in different ways depending on individual differences and context.'

Questions 14–17

Reading Passage 2 has six paragraphs, **A–F**.

Which paragraph contains the following information?

*Write the correct letter, **A–F**, in boxes 14–17 on your answer sheet.*

NB *You may use any letter more than once.*

14 reference to research showing the beneficial effects of oxytocin on people

15 reasons why the effects of oxytocin are complex

16 mention of a period in which oxytocin attracted little scientific attention

17 reference to people ignoring certain aspects of their research data

Questions 18–20

Look at the following research findings (Questions 18–20) and the list of researchers below.

*Match each research finding with the correct researcher, **A–F**.*

*Write the correct letter, **A–F**, in boxes 18–20 on your answer sheet.*

18 People are more trusting when affected by oxytocin.

19 Oxytocin increases people's feelings of jealousy.

20 The effect of oxytocin varies from one type of person to another.

List of Researchers

A	Markus Heinrichs
B	Simone Shamay-Tsoory
C	Jennifer Bartz
D	Carolyn DeClerck
E	Carsten De Dreu
F	Sue Carter

Questions 21–26

Complete the summary below.

Choose ***ONE WORD ONLY*** *from the passage for each answer.*

Write your answers in boxes 21–26 on your answer sheet.

Oxytocin research

The earliest findings about oxytocin and bonding came from research involving **21** ..... . It was also discovered that humans produce oxytocin during **22** ..... . An experiment in 2005, in which participants were given either oxytocin or a **23** ..... , reinforced the belief that the hormone had a positive effect.

However, later research suggests that this is not always the case. A study at the University of Haifa where participants took part in a **24** ..... revealed the negative emotions which oxytocin can trigger. A study at the University of Antwerp showed people's lack of willingness to help **25** ..... while under the influence of oxytocin. Meanwhile, research at the University of Amsterdam revealed that people who have been given oxytocin consider **26** ..... that are familiar to them in their own country to have more positive associations than those from other cultures.

READING PASSAGE 3

*You should spend about 20 minutes on **Questions 27–40**, which are based on Reading Passage 3 below.*

MAKING THE MOST OF TRENDS

Experts from Harvard Business School give advice to managers

Most managers can identify the major trends of the day. But in the course of conducting research in a number of industries and working directly with companies, we have discovered that managers often fail to recognize the less obvious but profound ways these trends are influencing consumers' aspirations, attitudes, and behaviors. This is especially true of trends that managers view as peripheral to their core markets.

Many ignore trends in their innovation strategies or adopt a wait-and-see approach and let competitors take the lead. At a minimum, such responses mean missed profit opportunities. At the extreme, they can jeopardize a company by ceding to rivals the opportunity to transform the industry. The purpose of this article is twofold: to spur managers to think more expansively about how trends could engender new value propositions in their core markets, and to provide some high-level advice on how to make market research and product development personnel more adept at analyzing and exploiting trends.

One strategy, known as 'infuse and augment', is to design a product or service that retains most of the attributes and functions of existing products in the category but adds others that address the needs and desires unleashed by a major trend. A case in point is the Poppy range of handbags, which the firm Coach created in response to the economic downturn of 2008. The Coach brand had been a symbol of opulence and luxury for nearly 70 years, and the most obvious reaction to the downturn would have been to lower prices. However, that would have risked cheapening the brand's image. Instead, they initiated a consumer-research project which revealed that customers were eager to lift themselves and the country out of tough times. Using these insights, Coach launched the lower-priced Poppy handbags, which were in vibrant colors, and looked more youthful and playful than conventional Coach products. Creating the sub-brand allowed Coach to avert an across-the-board price cut. In contrast to the many companies that responded to the recession by cutting prices, Coach saw the new consumer mindset as an opportunity for innovation and renewal.

A further example of this strategy was supermarket Tesco's response to consumers' growing concerns about the environment. With that in mind, Tesco, one of the world's top five retailers, introduced its Greener Living program, which demonstrates the company's commitment to protecting the environment by involving consumers in ways that produce tangible results. For example, Tesco customers can accumulate points for such activities as reusing bags, recycling cans and printer cartridges, and buying home-insulation materials. Like points earned on regular purchases, these green points can be redeemed for cash. Tesco has not abandoned its traditional retail offerings but augmented its business with these innovations, thereby infusing its value proposition with a green streak.

A more radical strategy is 'combine and transcend'. This entails combining aspects of the product's existing value proposition with attributes addressing changes arising from a trend, to create a novel experience – one that may land the company in an entirely new market space. At first glance, spending resources to incorporate elements of a seemingly irrelevant trend into one's core offerings sounds like it's hardly worthwhile. But consider Nike's move to integrate the digital revolution into its reputation for high-performance athletic footwear. In 2006, they teamed up with technology company Apple to launch Nike+, a digital sports kit comprising a sensor that attaches to the running shoe and a wireless receiver that connects to the user's iPod. By combining Nike's original value proposition for amateur athletes with one for digital consumers, the Nike+ sports kit and web interface moved the company from a focus on athletic apparel to a new plane of engagement with its customers.

A third approach, known as 'counteract and reaffirm', involves developing products or services that stress the values traditionally associated with the category in ways that allow consumers to oppose – or at least temporarily escape from – the aspects of trends they view as undesirable. A product that accomplished this is the ME2, a video game created by Canada's iToys. By reaffirming the toy category's association with physical play, the ME2 counteracted some of the widely perceived negative impacts of digital gaming devices. Like other handheld games, the device featured a host of exciting interactive games, a full-color LCD screen, and advanced 3D graphics. What set it apart was that it incorporated the traditional physical component of children's play: it contained a pedometer, which tracked and awarded points for physical activity (walking, running, biking, skateboarding, climbing stairs). The child could use the points to enhance various virtual skills needed for the video game. The ME2, introduced in mid-2008, catered to kids' huge desire to play video games while countering the negatives, such as associations with lack of exercise and obesity.

Once you have gained perspective on how trend-related changes in consumer opinions and behaviors impact on your category, you can determine which of our three innovation strategies to pursue. When your category's basic value proposition continues to be meaningful for consumers influenced by the trend, the infuse-and-augment strategy will allow you to reinvigorate the category. If analysis reveals an increasing disparity between your category and consumers' new focus, your innovations need to transcend the category to integrate the two worlds. Finally, if aspects of the category clash with undesired outcomes of a trend, such as associations with unhealthy lifestyles, there is an opportunity to counteract those changes by reaffirming the core values of your category.

Trends – technological, economic, environmental, social, or political – that affect how people perceive the world around them and shape what they expect from products and services present firms with unique opportunities for growth.

Questions 27–31

*Choose the correct letter, **A**, **B**, **C** or **D**.*

Write the correct letter in boxes 27–31 on your answer sheet.

27 In the first paragraph, the writer says that most managers

- **A** fail to spot the key consumer trends of the moment.
- **B** make the mistake of focusing only on the principal consumer trends.
- **C** misinterpret market research data relating to current consumer trends.
- **D** are unaware of the significant impact that trends have on consumers' lives.

28 According to the third paragraph, Coach was anxious to

- **A** follow what some of its competitors were doing.
- **B** maintain its prices throughout its range.
- **C** safeguard its reputation as a manufacturer of luxury goods.
- **D** modify the entire look of its brand to suit the economic climate.

29 What point is made about Tesco's Greener Living programme?

- **A** It did not require Tesco to modify its core business activities.
- **B** It succeeded in attracting a more eco-conscious clientele.
- **C** Its main aim was to raise consumers' awareness of environmental issues.
- **D** It was not the first time that Tesco had implemented such an initiative.

30 What does the writer suggest about Nike's strategy?

- **A** It was an extremely risky strategy at the time.
- **B** It was a strategy that only a major company could afford to follow.
- **C** It was the type of strategy that would not have been possible in the past.
- **D** It was the kind of strategy which might appear to have few obvious benefits.

31 What was original about the ME2?

- **A** It contained technology that had been developed for the sports industry.
- **B** It appealed to young people who were keen to improve their physical fitness.
- **C** It took advantage of a current trend for video games with colourful 3D graphics.
- **D** It was a handheld game that addressed people's concerns about unhealthy lifestyles.

Questions 32–37

Look at the following statements (Questions 32–37) and the list of companies below.

Match each statement with the correct company, ***A****,* ***B****,* ***C*** *or* ***D****.*

Write the correct letter, ***A****,* ***B****,* ***C*** *or* ***D****, in boxes 32–37 on your answer sheet.*

NB You may use any letter more than once.

32 It turned the notion that its products could have harmful effects to its own advantage.

33 It extended its offering by collaborating with another manufacturer.

34 It implemented an incentive scheme to demonstrate its corporate social responsibility.

35 It discovered that customers had a positive attitude towards dealing with difficult circumstances.

36 It responded to a growing lifestyle trend in an unrelated product sector.

37 It successfully avoided having to charge its customers less for its core products.

List of companies

A	Coach
B	Tesco
C	Nike
D	iToys

Questions 38–40

*Complete each sentence with the correct ending, **A**, **B**, **C** or **D** below.*

*Write the correct letter, **A**, **B**, **C** or **D**, in boxes 38–40 on your answer sheet.*

38 If there are any trend-related changes impacting on your category, you should

39 If a current trend highlights a negative aspect of your category, you should

40 If the consumers' new focus has an increasing lack of connection with your offering, you should

A	employ a combination of strategies to maintain your consumer base.
B	identify the most appropriate innovation strategy to use.
C	emphasise your brand's traditional values with the counteract-and-affirm strategy.
D	use the combine-and-transcend strategy to integrate the two worlds.

WRITING

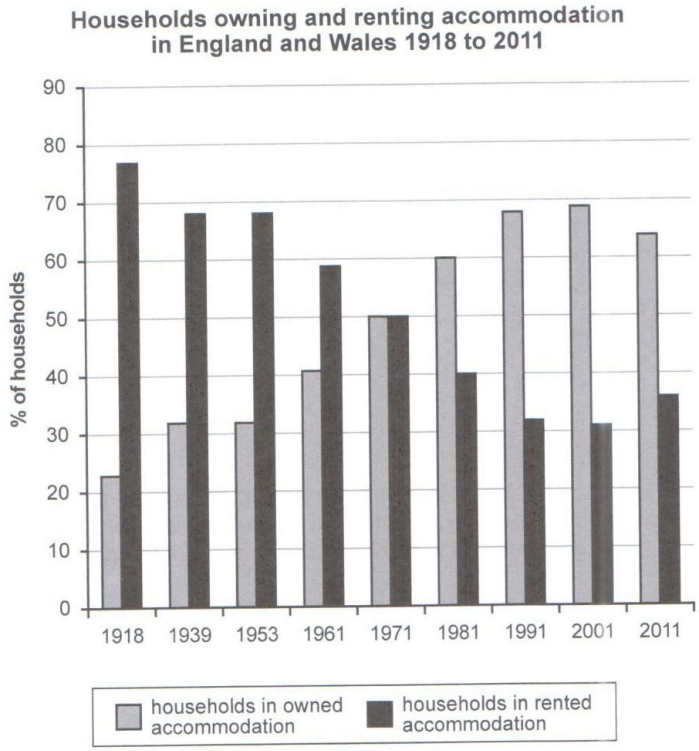
WRITING TASK 1

You should spend about 20 minutes on this task.

The chart below shows the percentage of households in owned and rented accommodation in England and Wales between 1918 and 2011.

Summarise the information by selecting and reporting the main features, and make comparisons where relevant.

Write at least 150 words.



WRITING TASK 2

You should spend about 40 minutes on this task.

Write about the following topic:

> ***Some people believe that nowadays we have too many choices.***
>
> ***To what extent do you agree or disagree with this statement?***

Give reasons for your answer and include any relevant examples from your own knowledge or experience.

Write at least 250 words.

SPEAKING

PART 1

The examiner asks the candidate about him/herself, his/her home, work or studies and other familiar topics.

EXAMPLE

Age

- Are you happy to be the age you are now? [Why/Why not?]
- When you were a child, did you think a lot about your future? [Why/Why not?]
- Do you think you have changed as you have got older? [Why/Why not?]
- What will be different about your life in the future? [Why]

PART 2

Describe a time when you started using a new technological device (e.g. a new computer or phone).

You should say:
what device you started using
why you started using this device
how easy or difficult it was to use
and explain how helpful this device was to you.

You will have to talk about the topic for one to two minutes. You have one minute to think about what you are going to say. You can make some notes to help you if you wish.

PART 3

Discussion topics:

Technology and education

Example questions:
What is the best age for children to start computer lessons?
Do you think that schools should use more technology to help children learn?
Do you agree or disagree that computers will replace teachers one day?

Technology and society

Example questions:
How much has technology improved how we communicate with each other?
Do you agree that there are still many more major technological innovations to be made?
Could you suggest some reasons why some people are deciding to reduce their use of technology?

Test 3

LISTENING

SECTION 1 *Questions 1–10*

Complete the notes below.

*Write **ONE WORD AND/OR A NUMBER** for each answer.*

Moving to Banford City

Example

Linda recommends living in suburb of: *Dalton*

Accommodation

- Average rent: **1** £ ..... a month

Transport

- Linda travels to work by **2** .....
- Limited **3** ..... in city centre
- Trains to London every **4** ..... minutes
- Poor train service at **5** .....

Advantages of living in Banford

- New **6** ..... opened recently
- **7** ..... has excellent reputation
- Good **8** ..... on Bridge Street

Meet Linda

- Meet Linda on **9** ..... after 5.30 pm
- In the **10** ..... opposite the station

SECTION 2 *Questions 11–20*

Questions 11–16

What advantage does the speaker mention for each of the following physical activities?

*Choose **SIX** answers from the box and write the correct letter, **A–G**, next to Questions 11–16.*

	Advantages
A	not dependent on season
B	enjoyable
C	low risk of injury
D	fitness level unimportant
E	sociable
F	fast results
G	motivating

Physical activities

11 using a gym .....

12 running .....

13 swimming .....

14 cycling .....

15 doing yoga .....

16 training with a personal trainer .....

Questions 17 and 18

*Choose **TWO** letters, **A–E**.*

For which **TWO** reasons does the speaker say people give up going to the gym?

A lack of time
B loss of confidence
C too much effort required
D high costs
E feeling less successful than others

Questions 19 and 20

*Choose **TWO** letters, **A–E**.*

Which **TWO** pieces of advice does the speaker give for setting goals?

A write goals down
B have achievable aims
C set a time limit
D give yourself rewards
E challenge yourself

SECTION 3 *Questions 21–30*

Questions 21–24

*Choose the correct letter, **A**, **B** or **C**.*

Project on using natural dyes to colour fabrics

21 What first inspired Jim to choose this project?

A textiles displayed in an exhibition
B a book about a botanic garden
C carpets he saw on holiday

22 Jim eventually decided to do a practical investigation which involved

A using a range of dyes with different fibres.
B applying different dyes to one type of fibre.
C testing one dye and a range of fibres.

23 When doing his experiments, Jim was surprised by

A how much natural material was needed to make the dye.
B the fact that dyes were widely available on the internet.
C the time that he had to leave the fabric in the dye.

24 What problem did Jim have with using tartrazine as a fabric dye?

A It caused a slight allergic reaction.
B It was not a permanent dye on cotton.
C It was ineffective when used on nylon.

Questions 25–30

What problem is identified with each of the following natural dyes?

*Choose **SIX** answers from the box and write the correct letter, **A–H**, next to Questions 25–30.*

	Problems
A	It is expensive.
B	The colour is too strong.
C	The colour is not long-lasting.
D	It is very poisonous.
E	It can damage the fabric.
F	The colour may be unexpected.
G	It is unsuitable for some fabrics.
H	It is not generally available.

Natural dyes

25 turmeric .....

26 beetroot .....

27 Tyrian purple .....

28 logwood .....

29 cochineal .....

30 metal oxide .....

SECTION 4 *Questions 31–40*

Complete the notes below.

*Write **ONE WORD ONLY** for each answer.*

The sleepy lizard (*tiliqua rugosa*)

Description

- They are common in Western and South Australia
- They are brown, but recognisable by their blue **31** .....
- They are relatively large
- Their diet consists mainly of **32** .....
- Their main predators are large birds and **33** .....

Navigation study

- One study found that lizards can use the **34** ..... to help them navigate

Observations in the wild

- Observations show that these lizards keep the same **35** ..... for several years

What people want

- Possible reasons:
  - to improve the survival of their young (but little **36** ..... has been noted between parents and children)
  - to provide **37** ..... for female lizards

Tracking study

- A study was carried out using GPS systems attached to the **38** ..... of the lizards
- This provided information on the lizards' location and even the number of **39** ..... taken
- It appeared that the lizards were trying to avoid one another
- This may be in order to reduce chances of **40** .....

READING

READING PASSAGE 1

*You should spend about 20 minutes on **Questions 1–13**, which are based on Reading Passage 1 below.*

The coconut palm

For millennia, the coconut has been central to the lives of Polynesian and Asian peoples. In the western world, on the other hand, coconuts have always been exotic and unusual, sometimes rare. The Italian merchant traveller Marco Polo apparently saw coconuts in South Asia in the late 13th century, and among the mid-14th-century travel writings of Sir John Mandeville there is mention of 'great Notes of Ynde' (great Nuts of India). Today, images of palm-fringed tropical beaches are clichés in the west to sell holidays, chocolate bars, fizzy drinks and even romance.

Typically, we envisage coconuts as brown cannonballs that, when opened, provide sweet white flesh. But we see only part of the fruit and none of the plant from which they come. The coconut palm has a smooth, slender, grey trunk, up to 30 metres tall. This is an important source of timber for building houses, and is increasingly being used as a replacement for endangered hardwoods in the furniture construction industry. The trunk is surmounted by a rosette of leaves, each of which may be up to six metres long. The leaves have hard veins in their centres which, in many parts of the world, are used as brushes after the green part of the leaf has been stripped away. Immature coconut flowers are tightly clustered together among the leaves at the top of the trunk. The flower stems may be tapped for their sap to produce a drink, and the sap can also be reduced by boiling to produce a type of sugar used for cooking.

Coconut palms produce as many as seventy fruits per year, weighing more than a kilogram each. The wall of the fruit has three layers: a waterproof outer layer, a fibrous middle layer and a hard, inner layer. The thick fibrous middle layer produces coconut fibre, 'coir', which has numerous uses and is particularly important in manufacturing ropes. The woody innermost layer, the shell, with its three prominent 'eyes', surrounds the seed. An important product obtained from the shell is charcoal, which is widely used in various industries as well as in the home as a cooking fuel. When broken in half, the shells are also used as bowls in many parts of Asia.

Inside the shell are the nutrients (endosperm) needed by the developing seed. Initially, the endosperm is a sweetish liquid, coconut water, which is enjoyed as a drink, but also provides the hormones which encourage other plants to grow more rapidly and produce higher yields. As the fruit matures, the coconut water gradually solidifies to form the brilliant white, fat-rich, edible flesh or meat. Dried coconut flesh, 'copra', is made into coconut oil and coconut milk, which are widely used in cooking in different parts of the world, as well as in cosmetics. A derivative of coconut fat, glycerine, acquired strategic

importance in a quite different sphere, as Alfred Nobel introduced the world to his nitroglycerine-based invention: dynamite.

Their biology would appear to make coconuts the great maritime voyagers and coastal colonizers of the plant world. The large, energy-rich fruits are able to float in water and tolerate salt, but cannot remain viable indefinitely; studies suggest after about 110 days at sea they are no longer able to germinate. Literally cast onto desert island shores, with little more than sand to grow in and exposed to the full glare of the tropical sun, coconut seeds are able to germinate and root. The air pocket in the seed, created as the endosperm solidifies, protects the embryo. In addition, the fibrous fruit wall that helped it to float during the voyage stores moisture that can be taken up by the roots of the coconut seedling as it starts to grow.

There have been centuries of academic debate over the origins of the coconut. There were no coconut palms in West Africa, the Caribbean or the east coast of the Americas before the voyages of the European explorers Vasco da Gama and Columbus in the late 15th and early 16th centuries. 16th century trade and human migration patterns reveal that Arab traders and European sailors are likely to have moved coconuts from South and Southeast Asia to Africa and then across the Atlantic to the east coast of America. But the origin of coconuts discovered along the west coast of America by 16th century sailors has been the subject of centuries of discussion. Two diametrically opposed origins have been proposed: that they came from Asia, or that they were native to America. Both suggestions have problems. In Asia, there is a large degree of coconut diversity and evidence of millennia of human use – but there are no relatives growing in the wild. In America, there are close coconut relatives, but no evidence that coconuts are indigenous. These problems have led to the intriguing suggestion that coconuts originated on coral islands in the Pacific and were dispersed from there.

Questions 1–8

Complete the table below.

*Choose **ONE WORD ONLY** from the passage for each answer.*

Write your answers in boxes 1–8 on your answer sheet.

THE COCONUT PALM		
Part	**Description**	**Uses**
trunk	up to 30 metres	timber for houses and the making of **1** .....
leaves	up to 6 metres long	to make brushes
flowers	at the top of the trunk	stems provide sap, used as a drink or a source of **2** .....
fruits	outer layer	
	middle layer (coir fibres)	used for **3** ..... , etc.
	inner layer (shell)	a source of **4** ..... (when halved) for **5** .....
	coconut water	a drink a source of **6** ..... for other plants
	coconut flesh	oil and milk for cooking and **7** ..... glycerine (an ingredient in **8** .....)

Questions 9–13

Do the following statements agree with the information given in Reading Passage 1?

In boxes 9–13 on your answer sheet, write

TRUE	*if the statement agrees with the information*
FALSE	*if the statement contradicts the information*
NOT GIVEN	*if there is no information on this*

9 Coconut seeds need shade in order to germinate.

10 Coconuts were probably transported to Asia from America in the 16th century.

11 Coconuts found on the west coast of America were a different type from those found on the east coast.

12 All the coconuts found in Asia are cultivated varieties.

13 Coconuts are cultivated in different ways in America and the Pacific.

READING PASSAGE 2

*You should spend about 20 minutes on **Questions 14–26**, which are based on Reading Passage 2 below.*

How baby talk gives infant brains a boost

A The typical way of talking to a baby – high-pitched, exaggerated and repetitious – is a source of fascination for linguists who hope to understand how 'baby talk' impacts on learning. Most babies start developing their hearing while still in the womb, prompting some hopeful parents to play classical music to their pregnant bellies. Some research even suggests that infants are listening to adult speech as early as 10 weeks before being born, gathering the basic building blocks of their family's native tongue.

B Early language exposure seems to have benefits to the brain – for instance, studies suggest that babies raised in bilingual homes are better at learning how to mentally prioritize information. So how does the sweet if sometimes absurd sound of infant-directed speech influence a baby's development? Here are some recent studies that explore the science behind baby talk.

C Fathers don't use baby talk as often or in the same ways as mothers – and that's perfectly OK, according to a new study. Mark VanDam of Washington State University at Spokane and colleagues equipped parents with recording devices and speech-recognition software to study the way they interacted with their youngsters during a normal day. 'We found that moms do exactly what you'd expect and what's been described many times over,' VanDam explains. 'But we found that dads aren't doing the same thing. Dads didn't raise their pitch or fundamental frequency when they talked to kids.' Their role may be rooted in what is called the bridge hypothesis, which dates back to 1975. It suggests that fathers use less familial language to provide their children with a bridge to the kind of speech they'll hear in public. 'The idea is that a kid gets to practice a certain kind of speech with mom and another kind of speech with dad, so the kid then has a wider repertoire of kinds of speech to practice,' says VanDam.

D Scientists from the University of Washington and the University of Connecticut collected thousands of 30-second conversations between parents and their babies, fitting 26 children with audio-recording vests that captured language and sound during a typical eight-hour day. The study found that the more baby talk parents used, the more their youngsters began to babble. And when researchers saw the same babies at age two, they found that frequent baby talk had dramatically boosted vocabulary, regardless of socioeconomic status. 'Those children who listened to a lot of baby talk were talking more than the babies that listened to more

adult talk or standard speech,' says Nairán Ramírez-Esparza of the University of Connecticut. 'We also found that it really matters whether you use baby talk in a one-on-one context,' she adds. 'The more parents use baby talk one-on-one, the more babies babble, and the more they babble, the more words they produce later in life.'

E Another study suggests that parents might want to pair their youngsters up so they can babble more with their own kind. Researchers from McGill University and Université du Québec à Montréal found that babies seem to like listening to each other rather than to adults – which may be why baby talk is such a universal tool among parents. They played repeating vowel sounds made by a special synthesizing device that mimicked sounds made by either an adult woman or another baby. This way, only the impact of the auditory cues was observed. The team then measured how long each type of sound held the infants' attention. They found that the 'infant' sounds held babies' attention nearly 40 percent longer. The baby noises also induced more reactions in the listening infants, like smiling or lip moving, which approximates sound making. The team theorizes that this attraction to other infant sounds could help launch the learning process that leads to speech. 'It may be some property of the sound that is just drawing their attention,' says study co-author Linda Polka. 'Or maybe they are really interested in that particular type of sound because they are starting to focus on their own ability to make sounds. We are speculating here but it might catch their attention because they recognize it as a sound they could possibly make.'

F In a study published in *Proceedings of the National Academy of Sciences*, a total of 57 babies from two slightly different age groups – seven months and eleven and a half months – were played a number of syllables from both their native language (English) and a non-native tongue (Spanish). The infants were placed in a brain-activation scanner that recorded activity in a brain region known to guide the motor movements that produce speech. The results suggest that listening to baby talk prompts infant brains to start practicing their language skills. 'Finding activation in motor areas of the brain when infants are simply listening is significant, because it means the baby brain is engaged in trying to talk back right from the start, and suggests that seven-month-olds' brains are already trying to figure out how to make the right movements that will produce words,' says co-author Patricia Kuhl. Another interesting finding was that while the seven-month-olds responded to all speech sounds regardless of language, the brains of the older infants worked harder at the motor activations of non-native sounds compared to native sounds. The study may have also uncovered a process by which babies recognize differences between their native language and other tongues.

Questions 14–17

Look at the following ideas (Questions 14–17) and the list of researchers below.

*Match each idea with the correct researcher, **A**, **B** or **C**.*

*Write the correct letter, **A**, **B** or **C**, in boxes 14–17 on your answer sheet.*

NB *You may use any letter more than once.*

14 the importance of adults giving babies individual attention when talking to them

15 the connection between what babies hear and their own efforts to create speech

16 the advantage for the baby of having two parents each speaking in a different way

17 the connection between the amount of baby talk babies hear and how much vocalising they do themselves

	List of Researchers
A	Mark VanDam
B	Nairán Ramirez-Esparza
C	Patricia Kuhl

Questions 18–23

Complete the summary below.

*Choose **NO MORE THAN TWO WORDS** from the passage for each answer.*

Write your answers in boxes 18–23 on your answer sheet.

Research into how parents talk to babies

Researchers at Washington State University used **18** ..... , together with specialised computer programs, to analyse how parents interacted with their babies during a normal day. The study revealed that **19** ..... tended not to modify their ordinary speech patterns when interacting with their babies. According to an idea known as the **20** ..... , they may use a more adult type of speech to prepare infants for the language they will hear outside the family home. According to the researchers, hearing baby talk from one parent and 'normal' language from the other expands the baby's **21** ..... of types of speech which they can practise.

Meanwhile, another study carried out by scientists from the University of Washington and the University of Connecticut recorded speech and sound using special **22** ..... that the babies were equipped with. When they studied the babies again at age two, they found that those who had heard a lot of baby talk in infancy had a much larger **23** ..... than those who had not.

Questions 24–26

Reading Passage 2 has six paragraphs, **A–F**.

Which paragraph contains the following information?

*Write the correct letter, **A–F**, in boxes 24–26 on your answer sheet.*

24 a reference to a change which occurs in babies' brain activity before the end of their first year

25 an example of what some parents do for their baby's benefit before birth

26 a mention of babies' preference for the sounds that other babies make

READING PASSAGE 3

*You should spend about 20 minutes on **Questions 27–40**, which are based on Reading Passage 3 below.*

Whatever happened to the Harappan Civilisation?

New research sheds light on the disappearance of an ancient society

A The Harappan Civilisation of ancient Pakistan and India flourished 5,000 years ago, but a thousand years later their cities were abandoned. The Harappan Civilisation was a sophisticated Bronze Age society who built 'megacities' and traded internationally in luxury craft products, and yet seemed to have left almost no depictions of themselves. But their lack of self-imagery – at a time when the Egyptians were carving and painting representations of themselves all over their temples – is only part of the mystery.

B 'There is plenty of archaeological evidence to tell us about the rise of the Harappan Civilisation, but relatively little about its fall,' explains archaeologist Dr Cameron Petrie of the University of Cambridge. 'As populations increased, cities were built that had great baths, craft workshops, palaces and halls laid out in distinct sectors. Houses were arranged in blocks, with wide main streets and narrow alleyways, and many had their own wells and drainage systems. It was very much a "thriving" civilisation.' Then around 2100 BC, a transformation began. Streets went uncleaned, buildings started to be abandoned, and ritual structures fell out of use. After their final demise, a millennium passed before really large-scale cities appeared once more in South Asia.

C Some have claimed that major glacier-fed rivers changed their course, dramatically affecting the water supply and agriculture; or that the cities could not cope with an increasing population, they exhausted their resource base, the trading economy broke down or they succumbed to invasion and conflict; and yet others that climate change caused an environmental change that affected food and water provision. 'It is unlikely that there was a single cause for the decline of the civilisation. But the fact is, until now, we have had little solid evidence from the area for most of the key elements,' said Petrie. 'A lot of the archaeological debate has really only been well-argued speculation.'

D A research team led by Petrie, together with Dr Ravindanath Singh of Banaras Hindu University in India, found early in their investigations that many of the archaeological sites were not where they were supposed to be, completely altering understanding of the way that this region was inhabited in the past. When they carried out a survey of how the larger area was settled in relation to sources of water, they found inaccuracies in the published geographic locations of ancient settlements ranging from several hundred metres to many kilometres. They realised

that any attempts to use the existing data were likely to be fundamentally flawed. Over the course of several seasons of fieldwork they carried out new surveys, finding an astonishing 198 settlement sites that were previously unknown.

E Now, research published by Dr Yama Dixit and Professor David Hodell, both from Cambridge's Department of Earth Sciences, has provided the first definitive evidence for climate change affecting the plains of north-western India, where hundreds of Harappan sites are known to have been situated. The researchers gathered shells of *Melanoides tuberculata* snails from the sediments of an ancient lake and used geochemical analysis as a means of tracing the climate history of the region. 'As today, the major source of water into the lake is likely to have been the summer monsoon,' says Dixit. 'But we have observed that there was an abrupt change about 4,100 years ago, when the amount of evaporation from the lake exceeded the rainfall – indicative of a drought.' Hodell adds: 'We estimate that the weakening of the Indian summer monsoon climate lasted about 200 years before recovering to the previous conditions, which we still see today.'

F It has long been thought that other great Bronze Age civilisations also declined at a similar time, with a global-scale climate event being seen as the cause. While it is possible that these local-scale processes were linked, the real archaeological interest lies in understanding the impact of these larger-scale events on different environments and different populations. 'Considering the vast area of the Harappan Civilisation with its variable weather systems,' explains Singh, 'it is essential that we obtain more climate data from areas close to the two great cities at Mohenjodaro and Harappa and also from the Indian Punjab.'

G Petrie and Singh's team is now examining archaeological records and trying to understand details of how people led their lives in the region five millennia ago. They are analysing grains cultivated at the time, and trying to work out whether they were grown under extreme conditions of water stress, and whether they were adjusting the combinations of crops they were growing for different weather systems. They are also looking at whether the types of pottery used, and other aspects of their material culture, were distinctive to specific regions or were more similar across larger areas. This gives us insight into the types of interactive networks that the population was involved in, and whether those changed.

H Petrie believes that archaeologists are in a unique position to investigate how past societies responded to environmental and climatic change. 'By investigating responses to environmental pressures and threats, we can learn from the past to engage with the public, and the relevant governmental and administrative bodies, to be more proactive in issues such as the management and administration of water supply, the balance of urban and rural development, and the importance of preserving cultural heritage in the future.'

Questions 27–31

Reading Passage 3 has eight paragraphs, **A–H**.

Which paragraph contains the following information?

*Write the correct letter, **A–H**, in boxes 27–31 on your answer sheet.*

NB *You may use any letter more than once.*

27 proposed explanations for the decline of the Harappan Civilisation

28 reference to a present-day application of some archaeological research findings

29 a difference between the Harappan Civilisation and another culture of the same period

30 a description of some features of Harappan urban design

31 reference to the discovery of errors made by previous archaeologists

Questions 32–36

Complete the summary below.

*Choose **ONE WORD ONLY** from the passage for each answer.*

Write your answers in boxes 32–36 on your answer sheet.

Looking at evidence of climate change

Yama Dixit and David Hodell have found the first definitive evidence of climate change affecting the plains of north-western India thousands of years ago. By collecting the **32** ..... of snails and analysing them, they discovered evidence of a change in water levels in a **33** ..... in the region. This occurred when there was less **34** ..... than evaporation, and suggests that there was an extended period of drought.

Petrie and Singh's team are using archaeological records to look at **35** ..... from five millennia ago, in order to know whether people had adapted their agricultural practices to changing climatic conditions. They are also examining objects including **36** ..... , so as to find out about links between inhabitants of different parts of the region and whether these changed over time.

Questions 37–40

Look at the following statements (Questions 37–40) and the list of researchers below.

*Match each statement with the correct researcher, **A**, **B**, **C** or **D**.*

*Write the correct letter, **A**, **B**, **C** or **D**, in boxes 37–40 on your answer sheet.*

NB *You may use any letter more than once.*

37 Finding further information about changes to environmental conditions in the region is vital.

38 Examining previous patterns of behaviour may have long-term benefits.

39 Rough calculations indicate the approximate length of a period of water shortage.

40 Information about the decline of the Harappan Civilisation has been lacking.

	List of Researchers
A	Cameron Petrie
B	Ravindanath Singh
C	Yama Dixit
D	David Hodell

WRITING

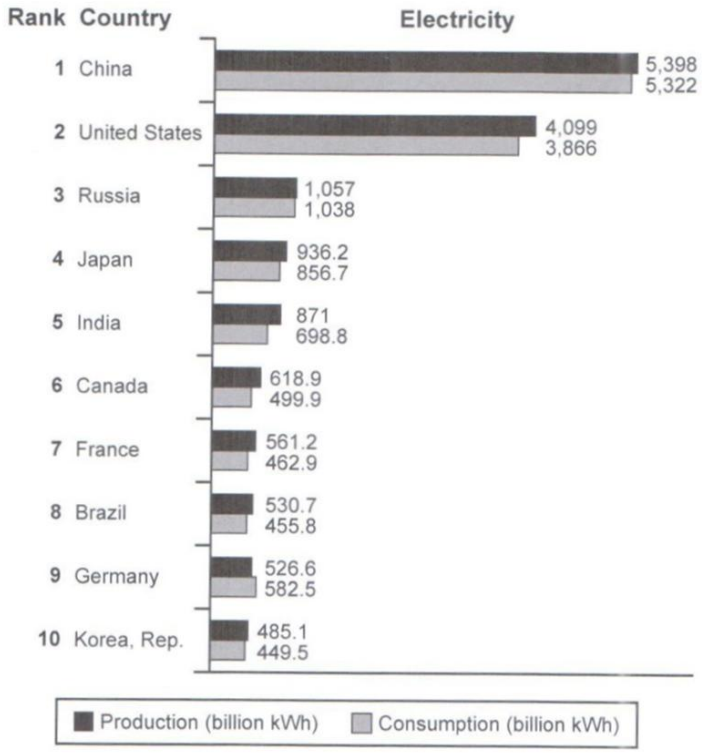
WRITING TASK 1

You should spend about 20 minutes on this task.

The bar chart below shows the top ten countries for the production and consumption of electricity in 2014.

Summarise the information by selecting and reporting the main features, and make comparisons where relevant.

Write at least 150 words.



WRITING TASK 2

You should spend about 40 minutes on this task.

Write about the following topic:

> ***Some people say History is one of the most important school subjects. Other people think that, in today's world, subjects like Science and Technology are more important than History.***
>
> ***Discuss both these views and give your own opinion.***

Give reasons for your answer and include any relevant examples from your own knowledge or experience.

Write at least 250 words.

SPEAKING

PART 1

The examiner asks the candidate about him/herself, his/her home, work or studies and other familiar topics.

EXAMPLE

Money

- When you go shopping, do you prefer to pay for things in cash or by card? [Why?]
- Do you ever save money to buy special things? [Why/Why not?]
- Would you ever take a job which had low pay? [Why/Why not?]
- Would winning a lot of money make a big difference to your life? [Why/Why not?]

PART 2

Describe an interesting discussion you had as part of your work or studies.

You should say:
what the subject of the discussion was
who you discussed the subject with
what opinions were expressed
and explain why you found the discussion interesting.

You will have to talk about the topic for one to two minutes. You have one minute to think about what you are going to say. You can make some notes to help you if you wish.

PART 3

Discussion topics:

Discussing problems with others

Example questions:
Why is it good to discuss problems with other people?
Do you think that it's better to talk to friends and not family about problems?
Is it always a good idea to tell lots of people about a problem?

Communication skills at work

Example questions:
Which communication skills are most important when taking part in meetings with colleagues?
What are the possible effects of poor written communication skills at work?
What do you think will be the future impact of technology on communication in the workplace?

Test 4

LISTENING

SECTION 1 *Questions 1–10*

Complete the notes below.

*Write **ONE WORD AND/OR A NUMBER** for each answer.*

Alex's Training

Example

Alex completed his training in ..2014..

About the applicant:

- At first, Alex did his training in the **1** ..... department.
- Alex didn't have a qualification from school in **2** ..... .
- Alex thinks he should have done the diploma in **3** ..... skills.
- Age of other trainees: the youngest was **4** ..... .

Benefits of doing training at JPNW:

- Lots of opportunities because of the size of the organisation.
- Trainees receive the same amount of **5** ..... as permanent staff.
- The training experience increases people's confidence a lot.
- Trainees go to **6** ..... one day per month.
- The company is in a convenient **7** ..... .

Advice for interview:

- Don't wear **8** ..... .
- Don't be **9** ..... .
- Make sure you **10** ..... .

SECTION 2 *Questions 11–20*

Questions 11–16

Choose the correct letter, ***A****,* ***B*** *or* ***C****.*

The Snow Centre

11 Annie recommends that when cross-country skiing, the visitors should

A get away from the regular trails.
B stop to enjoy views of the scenery.
C go at a slow speed at the beginning.

12 What does Annie tell the group about this afternoon's dog-sled trip?

A Those who want to can take part in a race.
B Anyone has the chance to drive a team of dogs.
C One group member will be chosen to lead the trail.

13 What does Annie say about the team relay event?

A All participants receive a medal.
B The course is 4 km long.
C Each team is led by a teacher.

14 On the snow-shoe trip, the visitors will

A visit an old gold mine.
B learn about unusual flowers.
C climb to the top of a mountain.

15 The cost of accommodation in the mountain hut includes

A a supply of drinking water.
B transport of visitors' luggage.
C cooked meals.

16 If there is a storm while the visitors are in the hut, they should

A contact the bus driver.
B wait until the weather improves.
C use the emergency locator beacon.

Questions 17–20

What information does Annie give about skiing on each of the following mountain trails?

*Choose **FOUR** answers from the box and write the correct letter, **A–F**, next to Questions 17–20.*

	Information
A	It has a good place to stop and rest.
B	It is suitable for all abilities.
C	It involves crossing a river.
D	It demands a lot of skill.
E	It may be closed in bad weather.
F	It has some very narrow sections.

Mountain trails

17 Highland Trail .....

18 Pine Trail .....

19 Stony Trail .....

20 Loser's Trail .....

SECTION 3 Questions 21–30

Questions 21–26

*Choose the correct letter, **A**, **B** or **C**.*

Labels giving nutritional information on food packaging

21 What was Jack's attitude to nutritional food labels before this project?

- **A** He didn't read everything on them.
- **B** He didn't think they were important.
- **C** He thought they were too complicated.

22 Alice says that before doing this project,

- **A** she was unaware of what certain foods contained.
- **B** she was too lazy to read food labels.
- **C** she was only interested in the number of calories.

23 When discussing supermarket brands of pizza, Jack agrees with Alice that

- **A** the list of ingredients is shocking.
- **B** he will hesitate before buying pizza again.
- **C** the nutritional label is misleading.

24 Jack prefers the daily value system to other labelling systems because it is

- **A** more accessible.
- **B** more logical.
- **C** more comprehensive.

25 What surprised both students about one flavour of crisps?

- **A** The percentage of artificial additives given was incorrect.
- **B** The products did not contain any meat.
- **C** The labels did not list all the ingredients.

26 What do the students think about research into the impact of nutritional food labelling?

- **A** It did not produce clear results.
- **B** It focused on the wrong people.
- **C** It made unrealistic recommendations.

Questions 27 and 28

*Choose **TWO** letters, **A–E**.*

Which **TWO** things surprised the students about the traffic-light system for nutritional labels?

A its widespread use
B the fact that it is voluntary for supermarkets
C how little research was done before its introduction
D its unpopularity with food manufacturers
E the way that certain colours are used

Questions 29 and 30

*Choose **TWO** letters, **A–E**.*

Which **TWO** things are true about the participants in the study on the traffic-light system?

A They had low literacy levels.
B They were regular consumers of packaged food.
C They were selected randomly.
D They were from all socio-economic groups.
E They were interviewed face-to-face.

SECTION 4 *Questions 31–40*

Complete the notes below.

*Write **ONE WORD ONLY** for each answer.*

The history of coffee

Coffee in the Arab world

- There was small-scale trade in wild coffee from Ethiopia.
- 1522: Coffee was approved in the Ottoman court as a type of medicine.
- 1623: In Constantinople, the ruler ordered the **31** ..... of every coffee house.

Coffee arrives in Europe (17th century)

- Coffee shops were compared to **32** ..... .
- They played an important part in social and **33** ..... changes.

Coffee and European colonisation

- European powers established coffee plantations in their colonies.
- Types of coffee were often named according to the **34** ..... they came from.
- In Brazil and the Caribbean, most cultivation depended on **35** ..... .
- In Java, coffee was used as a form of **36** ..... .
- Coffee became almost as important as **37**..... .
- The move towards the consumption of **38** ..... in Britain did not also take place in the USA.

Coffee in the 19th century

- Prices dropped because of improvements in **39** ..... .
- Industrial workers found coffee helped them to work at **40** ..... .

READING

READING PASSAGE 1

*You should spend about 20 minutes on **Questions 1–13**, which are based on Reading Passage 1 below.*

Cutty Sark: the fastest sailing ship of all time

The nineteenth century was a period of great technological development in Britain, and for shipping the major changes were from wind to steam power, and from wood to iron and steel.

The fastest commercial sailing vessels of all time were clippers, three-masted ships built to transport goods around the world, although some also took passengers. From the 1840s until 1869, when the Suez Canal opened and steam propulsion was replacing sail, clippers dominated world trade. Although many were built, only one has survived more or less intact: *Cutty Sark*, now on display in Greenwich, southeast London.

Cutty Sark's unusual name comes from the poem *Tam O'Shanter* by the Scottish poet Robert Burns. Tam, a farmer, is chased by a witch called Nannie, who is wearing a '*cutty sark*' – an old Scottish name for a short nightdress. The witch is depicted in *Cutty Sark*'s figurehead – the carving of a woman typically at the front of old sailing ships. In legend, and in Burns's poem, witches cannot cross water, so this was a rather strange choice of name for a ship.

Cutty Sark was built in Dumbarton, Scotland, in 1869, for a shipping company owned by John Willis. To carry out construction, Willis chose a new shipbuilding firm, Scott & Linton, and ensured that the contract with them put him in a very strong position. In the end, the firm was forced out of business, and the ship was finished by a competitor.

Willis's company was active in the tea trade between China and Britain, where speed could bring shipowners both profits and prestige, so *Cutty Sark* was designed to make the journey more quickly than any other ship. On her maiden voyage, in 1870, she set sail from London, carrying large amounts of goods to China. She returned laden with tea, making the journey back to London in four months. However, *Cutty Sark* never lived up to the high expectations of her owner, as a result of bad winds and various misfortunes. On one occasion, in 1872, the ship and a rival clipper, *Thermopylae*, left port in China on the same day. Crossing the Indian Ocean, *Cutty Sark* gained a lead of over 400 miles, but then her rudder was severely damaged in stormy seas, making her impossible to steer. The ship's crew had the daunting task of repairing the rudder at sea, and only succeeded at the second attempt. *Cutty Sark* reached London a week after *Thermopylae*.

Steam ships posed a growing threat to clippers, as their speed and cargo capacity increased. In addition, the opening of the Suez Canal in 1869, the same year that *Cutty Sark* was launched, had a serious impact. While steam ships could make use of the quick, direct route between the Mediterranean and the Red Sea, the canal was of no use to sailing ships, which needed the much stronger winds of the oceans, and so had to sail a far greater distance. Steam ships reduced the journey time between Britain and China by approximately two months.

By 1878, tea traders weren't interested in *Cutty Sark*, and instead, she took on the much less prestigious work of carrying any cargo between any two ports in the world. In 1880, violence aboard the ship led ultimately to the replacement of the captain with an incompetent drunkard who stole the crew's wages. He was suspended from service, and a new captain appointed. This marked a turnaround and the beginning of the most successful period in *Cutty Sark*'s working life, transporting wool from Australia to Britain. One such journey took just under 12 weeks, beating every other ship sailing that year by around a month.

The ship's next captain, Richard Woodget, was an excellent navigator, who got the best out of both his ship and his crew. As a sailing ship, *Cutty Sark* depended on the strong trade winds of the southern hemisphere, and Woodget took her further south than any previous captain, bringing her dangerously close to icebergs off the southern tip of South America. His gamble paid off, though, and the ship was the fastest vessel in the wool trade for ten years.

As competition from steam ships increased in the 1890s, and *Cutty Sark* approached the end of her life expectancy, she became less profitable. She was sold to a Portuguese firm, which renamed her *Ferreira*. For the next 25 years, she again carried miscellaneous cargoes around the world.

Badly damaged in a gale in 1922, she was put into Falmouth harbour in southwest England, for repairs. Wilfred Dowman, a retired sea captain who owned a training vessel, recognised her and tried to buy her, but without success. She returned to Portugal and was sold to another Portuguese company. Dowman was determined, however, and offered a high price: this was accepted, and the ship returned to Falmouth the following year and had her original name restored.

Dowman used *Cutty Sark* as a training ship, and she continued in this role after his death. When she was no longer required, in 1954, she was transferred to dry dock at Greenwich to go on public display. The ship suffered from fire in 2007, and again, less seriously, in 2014, but now *Cutty Sark* attracts a quarter of a million visitors a year.

Questions 1–8

Do the following statements agree with the information given in Reading Passage 1?

In boxes 1–8 on your answer sheet, write

TRUE	*if the statement agrees with the information*
FALSE	*if the statement contradicts the information*
NOT GIVEN	*if there is no information on this*

1 Clippers were originally intended to be used as passenger ships.

2 *Cutty Sark* was given the name of a character in a poem.

3 The contract between John Willis and Scott & Linton favoured Willis.

4 John Willis wanted *Cutty Sark* to be the fastest tea clipper travelling between the UK and China.

5 Despite storm damage, *Cutty Sark* beat *Thermopylae* back to London.

6 The opening of the Suez Canal meant that steam ships could travel between Britain and China faster than clippers.

7 Steam ships sometimes used the ocean route to travel between London and China.

8 Captain Woodget put *Cutty Sark* at risk of hitting an iceberg.

Questions 9–13

Complete the sentences below.

*Choose **ONE WORD ONLY** from the passage for each answer.*

Write your answers in boxes 9–13 on your answer sheet.

9 After 1880, *Cutty Sark* carried ..... as its main cargo during its most successful time.

10 As a captain and ..... , Woodget was very skilled.

11 *Ferreira* went to Falmouth to repair damage that a ..... had caused.

12 Between 1923 and 1954, *Cutty Sark* was used for .....

13 *Cutty Sark* has twice been damaged by ..... in the 21st century.

READING PASSAGE 2

You should spend about 20 minutes on ***Questions 14–26****, which are based on Reading Passage 2 below.*

SAVING THE SOIL

More than a third of the Earth's top layer is at risk. Is there hope for our planet's most precious resource?

A More than a third of the world's soil is endangered, according to a recent UN report. If we don't slow the decline, all farmable soil could be gone in 60 years. Since soil grows 95% of our food, and sustains human life in other more surprising ways, that is a huge problem.

B Peter Groffman, from the Cary Institute of Ecosystem Studies in New York, points out that soil scientists have been warning about the degradation of the world's soil for decades. At the same time, our understanding of its importance to humans has grown. A single gram of healthy soil might contain 100 million bacteria, as well as other microorganisms such as viruses and fungi, living amid decomposing plants and various minerals.

That means soils do not just grow our food, but are the source of nearly all our existing antibiotics, and could be our best hope in the fight against antibiotic-resistant bacteria. Soil is also an ally against climate change: as microorganisms within soil digest dead animals and plants, they lock in their carbon content, holding three times the amount of carbon as does the entire atmosphere. Soils also store water, preventing flood damage: in the UK, damage to buildings, roads and bridges from floods caused by soil degradation costs £233 million every year.

C If the soil loses its ability to perform these functions, the human race could be in big trouble. The danger is not that the soil will disappear completely, but that the microorganisms that give it its special properties will be lost. And once this has happened, it may take the soil thousands of years to recover.

Agriculture is by far the biggest problem. In the wild, when plants grow they remove nutrients from the soil, but then when the plants die and decay these nutrients are returned directly to the soil. Humans tend not to return unused parts of harvested crops directly to the soil to enrich it, meaning that the soil gradually becomes less fertile. In the past we developed strategies to get around the problem, such as regularly varying the types of crops grown, or leaving fields uncultivated for a season.

D But these practices became inconvenient as populations grew and agriculture had to be run on more commercial lines. A solution came in the early 20th century with the Haber-Bosch process for manufacturing ammonium nitrate. Farmers have been putting this synthetic fertiliser on their fields ever since.

But over the past few decades, it has become clear this wasn't such a bright idea. Chemical fertilisers can release polluting nitrous oxide into the atmosphere and excess is often washed away with the rain, releasing nitrogen into rivers. More recently, we have found that indiscriminate use of fertilisers hurts the soil itself, turning it acidic and salty, and degrading the soil they are supposed to nourish.

E One of the people looking for a solution to this problem is Pius Floris, who started out running a tree-care business in the Netherlands, and now advises some of the world's top soil scientists. He came to realise that the best way to ensure his trees flourished was to take care of the soil, and has developed a cocktail of beneficial bacteria, fungi and humus* to do this. Researchers at the University of Valladolid in Spain recently used this cocktail on soils destroyed by years of fertiliser overuse. When they applied Floris's mix to the desert-like test plots, a good crop of plants emerged that were not just healthy at the surface, but had roots strong enough to pierce dirt as hard as rock. The few plants that grew in the control plots, fed with traditional fertilisers, were small and weak.

F However, measures like this are not enough to solve the global soil degradation problem. To assess our options on a global scale we first need an accurate picture of what types of soil are out there, and the problems they face. That's not easy. For one thing, there is no agreed international system for classifying soil. In an attempt to unify the different approaches, the UN has created the Global Soil Map project. Researchers from nine countries are working together to create a map linked to a database that can be fed measurements from field surveys, drone surveys, satellite imagery, lab analyses and so on to provide real-time data on the state of the soil. Within the next four years, they aim to have mapped soils worldwide to a depth of 100 metres, with the results freely accessible to all.

G But this is only a first step. We need ways of presenting the problem that bring it home to governments and the wider public, says Pamela Chasek at the International Institute for Sustainable Development, in Winnipeg, Canada. 'Most scientists don't speak language that policy-makers can understand, and vice versa.' Chasek and her colleagues have proposed a goal of 'zero net land degradation'. Like the idea of carbon neutrality, it is an easily understood target that can help shape expectations and encourage action.

For soils on the brink, that may be too late. Several researchers are agitating for the immediate creation of protected zones for endangered soils. One difficulty here is defining what these areas should conserve: areas where the greatest soil diversity is present? Or areas of unspoilt soils that could act as a future benchmark of quality?

Whatever we do, if we want our soils to survive, we need to take action now.

* Humus: the part of the soil formed from dead plant material

Questions 14–17

Complete the summary below.

*Write **ONE WORD ONLY** from the passage for each answer.*

Write your answers in boxes 14–17 on your answer sheet.

Why soil degradation could be a disaster for humans

Healthy soil contains a large variety of bacteria and other microorganisms, as well as plant remains and **14** ..... . It provides us with food and also with antibiotics, and its function in storing **15** ..... has a significant effect on the climate. In addition, it prevents damage to property and infrastructure because it holds **16** ..... .

If these microorganisms are lost, soil may lose its special properties. The main factor contributing to soil degradation is the **17** ..... carried out by humans.

Questions 18–21

*Complete each sentence with the correct ending, **A–F**, below.*

*Write the correct letter, **A–F**, in boxes 18–21 on your answer sheet.*

18 Nutrients contained in the unused parts of harvested crops

19 Synthetic fertilisers produced with the Haber-Bosch process

20 Addition of a mixture developed by Pius Floris to the soil

21 The idea of zero net soil degradation

A	may improve the number and quality of plants growing there.
B	may contain data from up to nine countries.
C	may not be put back into the soil.
D	may help governments to be more aware of soil-related issues.
E	may cause damage to different aspects of the environment.
F	may be better for use at a global level.

Questions 22–26

Reading Passage 2 has seven paragraphs, ***A–G****.*

Which section contains the following information?

Write the correct letter, ***A–G****, in boxes 22–26 on your answer sheet.*

NB *You may use any letter more than once.*

22 a reference to one person's motivation for a soil-improvement project

23 an explanation of how soil stayed healthy before the development of farming

24 examples of different ways of collecting information on soil degradation

25 a suggestion for a way of keeping some types of soil safe in the near future

26 a reason why it is difficult to provide an overview of soil degradation

READING PASSAGE 3

*You should spend about 20 minutes on **Questions 27–40**, which are based on Reading Passage 3 below.*

Book Review

The Happiness Industry: How the Government and Big Business Sold Us Well-Being

By William Davies

'Happiness is the ultimate goal because it is self-evidently good. If we are asked why happiness matters we can give no further external reason. It just obviously does matter.' This pronouncement by Richard Layard, an economist and advocate of 'positive psychology', summarises the beliefs of many people today. For Layard and others like him, it is obvious that the purpose of government is to promote a state of collective well-being. The only question is how to achieve it, and here positive psychology – a supposed science that not only identifies what makes people happy but also allows their happiness to be measured – can show the way. Equipped with this science, they say, governments can secure happiness in society in a way they never could in the past.

It is an astonishingly crude and simple-minded way of thinking, and for that very reason increasingly popular. Those who think in this way are oblivious to the vast philosophical literature in which the meaning and value of happiness have been explored and questioned, and write as if nothing of any importance had been thought on the subject until it came to their attention. It was the philosopher Jeremy Bentham (1748–1832) who was more than anyone else responsible for the development of this way of thinking. For Bentham it was obvious that the human good consists of pleasure and the absence of pain. The Greek philosopher Aristotle may have identified happiness with self-realisation in the 4th century BC, and thinkers throughout the ages may have struggled to reconcile the pursuit of happiness with other human values, but for Bentham all this was mere metaphysics or fiction. Without knowing anything much of him or the school of moral theory he established – since they are by education and intellectual conviction illiterate in the history of ideas – our advocates of positive psychology follow in his tracks in rejecting as outmoded and irrelevant pretty much the entirety of ethical reflection on human happiness to date.

But as William Davies notes in his recent book *The Happiness Industry*, the view that happiness is the only self-evident good is actually a way of limiting moral inquiry. One of the virtues of this rich, lucid and arresting book is that it places the current cult of happiness in a well-defined historical framework. Rightly, Davies begins his story with Bentham, noting that he was far more than a philosopher. Davies writes, 'Bentham's activities were those which we might now associate with a public sector management consultant'. In the 1790s, he wrote to the Home Office suggesting that the departments of government be linked together through a set of 'conversation tubes', and to the Bank of England with a design for a printing device that could produce

unforgeable banknotes. He drew up plans for a 'frigidarium' to keep provisions such as meat, fish, fruit and vegetables fresh. His celebrated design for a prison to be known as a 'Panopticon', in which prisoners would be kept in solitary confinement while being visible at all times to the guards, was very nearly adopted. (Surprisingly, Davies does not discuss the fact that Bentham meant his Panopticon not just as a model prison but also as an instrument of control that could be applied to schools and factories.)

Bentham was also a pioneer of the 'science of happiness'. If happiness is to be regarded as a science, it has to be measured, and Bentham suggested two ways in which this might be done. Viewing happiness as a complex of pleasurable sensations, he suggested that it might be quantified by measuring the human pulse rate. Alternatively, money could be used as the standard for quantification: if two different goods have the same price, it can be claimed that they produce the same quantity of pleasure in the consumer. Bentham was more attracted by the latter measure. By associating money so closely to inner experience, Davies writes, Bentham 'set the stage for the entangling of psychological research and capitalism that would shape the business practices of the twentieth century'.

The Happiness Industry describes how the project of a science of happiness has become integral to capitalism. We learn much that is interesting about how economic problems are being redefined and treated as psychological maladies. In addition, Davies shows how the belief that inner states of pleasure and displeasure can be objectively measured has informed management studies and advertising. The tendency of thinkers such as J B Watson, the founder of behaviourism*, was that human beings could be shaped, or manipulated, by policymakers and managers. Watson had no factual basis for his view of human action. When he became president of the American Psychological Association in 1915, he 'had never even studied a single human being': his research had been confined to experiments on white rats. Yet Watson's reductive model is now widely applied, with 'behaviour change' becoming the goal of governments: in Britain, a 'Behaviour Insights Team' has been established by the government to study how people can be encouraged, at minimum cost to the public purse, to live in what are considered to be socially desirable ways.

Modern industrial societies appear to need the possibility of ever-increasing happiness to motivate them in their labours. But whatever its intellectual pedigree, the idea that governments should be responsible for promoting happiness is always a threat to human freedom.

* 'behaviourism': a branch of psychology which is concerned with observable behaviour

Questions 27–29

*Choose the correct letter, **A**, **B**, **C** or **D**.*

Write the correct letter in boxes 27–29 on your answer sheet.

27 What is the reviewer's attitude to advocates of positive psychology?

A They are wrong to reject the ideas of Bentham.
B They are over-influenced by their study of Bentham's theories.
C They have a fresh new approach to ideas on human happiness.
D They are ignorant about the ideas they should be considering.

28 The reviewer refers to the Greek philosopher Aristotle in order to suggest that happiness

A may not be just pleasure and the absence of pain.
B should not be the main goal of humans.
C is not something that should be fought for.
D is not just an abstract concept.

29 According to Davies, Bentham's suggestion for linking the price of goods to happiness was significant because

A it was the first successful way of assessing happiness.
B it established a connection between work and psychology.
C it was the first successful example of psychological research.
D it involved consideration of the rights of consumers.

Questions 30–34

*Complete the summary using the list of words **A–G** below.*

*Write the correct letter, **A–G**, in boxes 30–34 on your answer sheet.*

Jeremy Bentham

Jeremy Bentham was active in other areas besides philosophy. In the 1790s he suggested a type of technology to improve **30** ..... for different Government departments. He developed a new way of printing banknotes to increase **31** ..... and also designed a method for the **32** ..... of food. He also drew up plans for a prison which allowed the **33** ..... of prisoners at all times, and believed the same design could be used for other institutions as well. When researching happiness, he investigated possibilities for its **34** ..... , and suggested some methods of doing this.

A	measurement	**B**	security	**C**	implementation
D	profits	**E**	observation	**F**	communication
G	preservation				

Questions 35–40

Do the following statements agree with the claims of the writer in Reading Passage 3?

In boxes 35–40 on your answer sheet, write

YES	*if the statement agrees with the claims of the writer*
NO	*if the statement contradicts the claims of the writer*
NOT GIVEN	*if it is impossible to say what the writer thinks about this*

35 One strength of *The Happiness Industry* is its discussion of the relationship between psychology and economics.

36 It is more difficult to measure some emotions than others.

37 Watson's ideas on behaviourism were supported by research on humans he carried out before 1915.

38 Watson's ideas have been most influential on governments outside America.

39 The need for happiness is linked to industrialisation.

40 A main aim of government should be to increase the happiness of the population.

WRITING

WRITING TASK 1

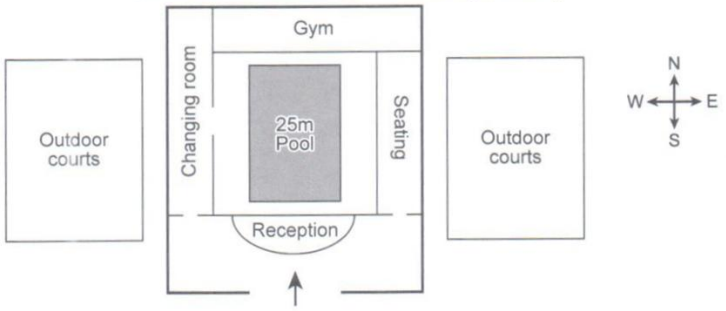
You should spend about 20 minutes on this task.

The plans below show the layout of a university's sports centre now, and how it will look after redevelopment.

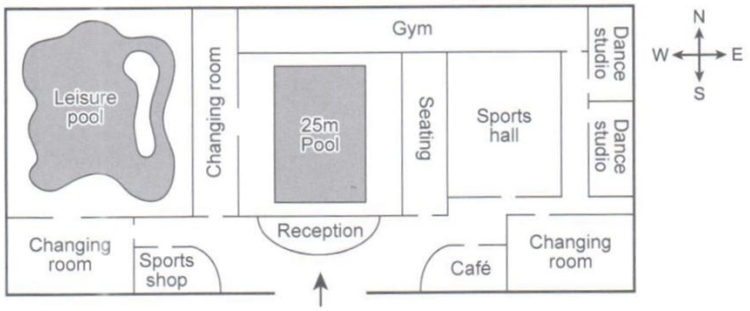
Summarise the information by selecting and reporting the main features, and make comparisons where relevant.

Write at least 150 words.

UNIVERSITY SPORTS CENTRE (present)



UNIVERSITY SPORTS CENTRE (future plans)



WRITING TASK 2

You should spend about 40 minutes on this task.

Write about the following topic:

> ***In spite of the advances made in agriculture, many people around the world still go hungry.***
>
> ***Why is this the case?***
>
> ***What can be done about this problem?***

Give reasons for your answer and include any relevant examples from your own knowledge or experience.

Write at least 250 words.

SPEAKING

PART 1

The examiner asks the candidate about him/herself, his/her home, work or studies and other familiar topics.

EXAMPLE

Animals

- Are there many animals or birds where you live? [Why/Why not?]
- How often do you watch programmes or read articles about wild animals? [Why?]
- Have you ever been to a zoo or a wildlife park? [Why/Why not?]
- Would you like to have a job working with animals? [Why/Why not?]

PART 2

Describe a website you use that helps you a lot in your work or studies.

You should say:
what the website is
how often you use the website
what information the website gives you
and explain how your work or studies would change if this website didn't exist.

You will have to talk about the topic for one to two minutes. You have one minute to think about what you are going to say. You can make some notes to help you if you wish.

PART 3

Discussion topics:

The internet

Example questions:
Why do some people find the internet addictive?
What would the world be like without the internet?
Do you think that the way people use the internet may change in the future?

Social media websites

Example questions:
What are the ways that social media can be used for positive purposes?
Why do some individuals post highly negative comments about other people on social media?
Do you think that companies' main form of advertising will be via social media in the future?

Audioscripts

TEST 1

SECTION 1

OFFICIAL: Hello, Tourist Information Centre, Mike speaking, how can I help you?

WOMAN: Oh, hi. I wanted to find out about cookery classes. I believe there are some one-day classes for tourists?

OFFICIAL: Well, they're open to everyone, but tourists are always welcome. OK, let me give you some details of what's available. There are several classes. One very popular one is at the Food Studio.

WOMAN: OK. *Example*

OFFICIAL: They focus on seasonal products, and as well as teaching you how to cook them, they also show you how to choose them.

WOMAN: Right, that sounds good. How big are the classes? *Q1*

OFFICIAL: I'm not sure exactly, but they'll be quite small.

WOMAN: And could I get a private lesson there?

OFFICIAL: I think so ... let me check, yes, they do offer those. Though in fact most of the people who attend the classes find it's a nice way of getting to know one another. *Q2*

WOMAN: I suppose it must be, yes.

OFFICIAL: And this company has a special deal for clients where they offer a discount of 20 percent if you return for a further class.

WOMAN: OK. But you said there were several classes? *Q3*

OFFICIAL: That's right. Another one you might be interested in is Bond's Cookery School. They're quite new, they just opened six months ago, but I've heard good things about them. They concentrate on teaching you to prepare healthy food, and they have quite a lot of specialist staff. *Q4*

WOMAN: So is that food for people on a diet and things like that? I don't know if I'd be interested in that.

OFFICIAL: Well, I don't think they particularly focus on low calorie diets or weight loss. It's more to do with recipes that look at specific needs, like including ingredients that will help build up your bones and make them stronger, that sort of thing. *Q5*

WOMAN: I see. Well, I might be interested, I'm not sure. Do they have a website I could check?

OFFICIAL: Yes, just key in the name of the school – it'll come up. And if you want to know more about them, every Thursday evening they have a lecture at the school. It's free and you don't need to book or anything, just turn up at 7.30. And that might give you an idea of whether you want to go to an actual class. *Q6*

OFFICIAL: OK, there's one more place you might be interested in. That's got a rather strange name, it's called The Arretsa Centre – that's spelled A-R-R-E-T-S-A. *Q7*

WOMAN: OK.

OFFICIAL: They've got a very good reputation. They do a bit of meat and fish cookery but they mostly specialise in vegetarian dishes. *Q8*

WOMAN: Right. That's certainly an area I'd like to learn more about. I've got lots of friends who don't eat meat. In fact, I think I might have seen that school today. Is it just by the market? *Q9*

OFFICIAL: That's right. So they don't have any problem getting their ingredients. They're right next door. And they also offer a special two-hour course in how to use a knife. They cover all the different skills – buying them, sharpening, chopping techniques. It gets booked up quickly though so you'd need to check it was available. *Q10*

WOMAN: Right, well thank you very much. I'll go and ...

SECTION 2

Good evening everyone. My name's Phil Sutton, and I'm chairman of the Highways Committee. We've called this meeting to inform members of the public about the new regulations for traffic and parking we're proposing for Granford. I'll start by summarising these changes before we open the meeting to questions.

So, why do we need to make these changes to traffic systems in Granford? Well, we're very aware that traffic is becoming an increasing problem. It's been especially noticeable with the increase in heavy traffic while they've been building the new hospital. But it's the overall rise in the volume of traffic of all kinds that's concerning us. To date there's not been any increase in traffic accidents, but that's not something we want to see happen, obviously. *Q11*

We recently carried out a survey of local residents, and their responses were interesting. People were very concerned about the lack of visibility on some roads due to cars parked along the sides of the roads. We'd expected complaints about the congestion near the school when parents are dropping off their children or picking them up, but this wasn't top of the list, and nor were noise and fumes from trucks and lorries, though they were mentioned by some people. *Q12*

We think these new traffic regulations would make a lot of difference. But we still have a long way to go. We've managed to keep our proposals within budget, just, so they can be covered by the Council. But, of course, it's no good introducing new regulations if we don't have a way of making sure that everyone obeys them, and that's an area we're still working on with the help of representatives from the police force. *Q13*

OK, so this slide shows a map of the central area of Granford, with the High Street in the middle and School Road on the right. Now, we already have a set of traffic lights in the High Street at the junction with Station Road, but we're planning to have another set at the other end, at the School Road junction, to regulate the flow of traffic along the High Street. *Q14*

We've decided we definitely need a pedestrian crossing. We considered putting this on School Road, just outside the school, but in the end we decided that could lead to a lot of traffic congestion so we decided to locate it on the High Street, crossing the road in front of the supermarket. That's a very busy area, so it should help things there. *Q15*

We're proposing some changes to parking. At present, parking isn't allowed on the High Street outside the library, but we're going to change that, and allow parking there, but not at the other end of the High Street near School Road. *Q16*

There'll be a new 'No Parking' sign on School Road, just by the entrance to the school, forbidding parking for 25 metres. This should improve visibility for drivers and pedestrians, especially on the bend just to the north of the school. *Q17*

As far as disabled drivers are concerned, at present they have parking outside the supermarket, but lorries also use those spaces, so we've got two new disabled parking spaces on the side road up towards the bank. It's not ideal, but probably better than the present arrangement. *Q18*

We also plan to widen the pavement on School Road. We think we can manage to get an extra half-metre on the bend just before you get to the school, on the same side of the road. *Q19*

Finally, we've introduced new restrictions on loading and unloading for the supermarket, so lorries will only be allowed to stop there before 8 am. That's the supermarket on School Road – we kept to the existing arrangements with the High Street supermarket. *Q20*

OK. So that's about it. Now, would anyone ...

SECTION 3

EMMA: We've got to choose a topic for our experiment, haven't we, Jack? Were you thinking of something to do with seeds?

JACK: That's right. I thought we could look at seed germination – how a seed begins to grow.

EMMA: OK. Any particular reason? I know you're hoping to work in plant science eventually ...

JACK: Yeah, but practically everything we do is going to feed into that. No, there's an optional module on seed structure and function in the third year that I might do, so I thought it might be useful for that. If I choose that option, I don't have to do a dissertation module. *Q21*

EMMA: Good idea.

JACK: Well, I thought for this experiment we could look at the relationship between seed size and the way the seeds are planted. So, we could plant different sized seeds in different ways, and see which grow best.

EMMA: OK. We'd need to allow time for the seeds to come up. *Q22*

JACK: That should be fine if we start now. A lot of the other possible experiments need quite a bit longer.

EMMA: So that'd make it a good one to choose. And I don't suppose it'd need much equipment; we're not doing chemical analysis or anything. Though that's not really an issue, we've got plenty of equipment in the laboratory.

JACK: Yeah. We need to have a word with the tutor if we're going to go ahead with it though. I'm sure our aim's OK. It's not very ambitious but the assignment's only ten percent of our final mark, isn't it? But we need to be sure we're the only ones doing it. *Q23*

EMMA: Yeah, it's only five percent actually, but it'd be a bit boring if everyone was doing it.

JACK: Did you read that book on seed germination on our reading list?

EMMA: The one by Graves? I looked through it for my last experiment, though it wasn't all that relevant there. It would be for this experiment, though. I found it quite hard to follow – lots about the theory, which I hadn't expected. *Q24*

JACK: Yes, I'd been hoping for something more practical. It does include references to the recent findings on genetically-modified seeds, though.

EMMA: Yes, that was interesting.

JACK: I read an article about seed germination by Lee Hall.

EMMA: About seeds that lie in the ground for ages and only germinate after a fire?

JACK: That's the one. I knew a bit about it already, but not about this research. His analysis of figures comparing the times of the fires and the proportion of seeds that germinated was done in a lot of detail – very impressive. Q25

EMMA: Was that the article with the illustrations of early stages of plant development? They were very clear.

JACK: I think those diagrams were in another article.

EMMA: Anyway, shall we have a look at the procedure for our experiment? We'll need to get going with it quite soon.

JACK: Right. So the first thing we have to do is find our seeds. I think vegetable seeds would be best. And obviously they mustn't all be the same size. So, how many sorts do we need? About four different ones? Q26

EMMA: I think that would be enough. There'll be quite a large number of seeds for each one.

JACK: Then, for each seed we need to find out how much it weighs, and also measure its dimensions, and we need to keep a careful record of all that. Q27

EMMA: That'll be quite time-consuming. And we also need to decide how deep we're going to plant the seeds – right on the surface, a few millimetres down, or several centimetres. Q28

JACK: OK. So then we get planting. Do you think we can plant several seeds together in the same plant pot? Q29

EMMA: No, I think we need a different one for each seed.

JACK: Right. And we'll need to label them – we can use different coloured labels. Then we wait for the seeds to germinate – I reckon that'll be about three weeks, depending on what the weather's like. Then we see if our plants have come up, and write down how tall they've grown. Q30

EMMA: Then all we have to do is look at our numbers, and see if there's any relation between them.

JACK: That's right. So ...

SECTION 4

Hi. Today we're going to be looking at animals in urban environments and I'm going to be telling you about some research on how they're affected by these environments.

Now, in evolutionary terms, urban environments represent huge upheavals, the sorts of massive changes that usually happen over millions of years. And we used to think that only a few species could adapt to this new environment. One species which is well known as being highly adaptable is the crow, and there've been various studies about how they manage to learn new skills. Q31 Another successful species is the pigeon, because they're able to perch on ledges on the walls of city buildings, just like they once perched on cliffs by the sea. Q32

But in fact, we're now finding that these early immigrants were just the start of a more general movement of animals into cities, and of adaptation by these animals to city life. And one thing that researchers are finding especially interesting is the speed with which they're doing this – we're not talking about gradual evolution here – these animals are changing fast. Q33

Let me tell you about some of the studies that have been carried out in this area. So, in the University of Minnesota, a biologist called Emilie Snell-Rood and her colleagues looked at specimens of urbanised small mammals such as mice and gophers that had been collected in Minnesota, and that are now kept in museums there. And she looked at specimens that

had been collected over the last hundred years, which is a very short time in evolutionary terms. And she found that during that time, these small mammals had experienced a jump in brain size when compared to rural mammals. Now, we can't be sure this means they're more intelligent, but since the sizes of other parts of the body didn't change, it does suggest that something cognitive was going on. And Snell-Rood thinks that this change might reflect the cognitive demands of adjusting to city life – having to look in different places to find food, for example, and coping with a whole new set of dangers. *Q34* *Q35*

Then over in Germany at the Max Planck Institute, there's another biologist called Catarina Miranda who's done some experiments with blackbirds living in urban and rural areas. And she's been looking not at their anatomy but at their behaviour. So as you might expect, she's found that the urban blackbirds tend to be quite bold – they're prepared to face up to a lot of threats that would frighten away their country counterparts. But there's one type of situation that does seem to frighten the urban blackbirds, and that's anything new – anything they haven't experienced before. And if you think about it, that's quite sensible for a bird living in the city. *Q36* *Q37*

Jonathan Atwell, in Indiana University, is looking at how a range of animals respond to urban environments. He's found that when they're under stress, their endocrine systems react by reducing the amount of hormones such as corticosterone into their blood. It's a sensible-seeming adaptation. A rat that gets scared every time a subway train rolls past won't be very successful. *Q38*

There's just one more study I'd like to mention which is by Sarah Partan and her team, and they've been looking at how squirrels communicate in an urban environment, and they've found that a routine part of their communication is carried out by waving their tails. You do also see this in the country, but it's much more prevalent in cities, possibly because it's effective in a noisy environment. *Q39*

So what are the long-term implications of this? One possibility is that we may see completely new species developing in cities. But on the other hand, it's possible that not all of these adaptations will be permanent. Once the animal's got accustomed to its new environment, it may no longer need the features it's developed. *Q40*

So, now we've had a look ...

TEST 2

SECTION 1

JIM: Hello, South City Cycling Club.

WOMAN: Oh, hi. Er … I want to find out about joining the club.

JIM: Right. I can help you there. I'm the club secretary and my name's Jim Hunter. *Example*

WOMAN: Oh, hi Jim.

JIM: So, are you interested in membership for yourself?

WOMAN: That's right.

JIM: OK. Well there are basically two types of adult membership. If you're pretty serious about cycling, there's the Full membership. That costs 260 dollars and that covers you not just for ordinary cycling but also for races both here in the city and also in other parts of Australia. *Q1*

WOMAN: Right. Well, I'm not really up to that standard. I was more interested in just joining a group to do some cycling in my free time.

JIM: Sure. That's why most people join. So, in that case you'd be better with the Recreational membership. That's 108 dollars if you're over 19, and 95 dollars if you're under.

WOMAN: I'm 25.

JIM: OK. It's paid quarterly, and you can upgrade it later to the Full membership if you want to, of course. Now both types of membership include the club fee of 20 dollars. They also provide insurance in case you have an accident, though we hope you won't need that, of course. *Q2*

WOMAN: No. OK, well, I'll go with the Recreational membership, I think. And that allows me to join in the club activities, and so on?

JIM: That's right. And once you're a member of the club, you're also permitted to wear our kit when you're out cycling. It's green and white.

WOMAN: Yes, I've seen cyclists wearing it. So, can I buy that at the club?

JIM: No, it's made to order by a company in Brisbane. You can find them online; they're called Jerriz. That's J-E-R-R-I-Z. You can use your membership number to put in an order on their website. *Q3*

WOMAN: OK. Now, can you tell me a bit about the rides I can do?

JIM: Sure. So we have training rides pretty well every morning, and they're a really good way of improving your cycling skills as well as your general level of fitness, but they're different levels. Level A is pretty fast – you're looking at about 30 or 35 kilometres an hour. If you can do about 25 kilometres an hour, you'd probably be level B, and then level C are the novices, who stay at about 15 kilometres per hour. *Q4*

WOMAN: Right. Well I reckon I'd be level B. So, when are the sessions for that level?

JIM: There are a couple each week. They're both early morning sessions. There's one on Tuesdays, and for that one you meet at 5.30 am, and the meeting point's the stadium – do you know where that is? *Q5*

WOMAN: Yes, it's quite near my home, in fact. OK, and how about the other one?

JIM: That's on Thursdays. It starts at the same time, but they meet at the main gate to the park. *Q6*

WOMAN: Is that the one just past the shopping mall?

JIM: That's it.

WOMAN: So how long are the rides?

JIM: They're about an hour and a half. So, if you have a job it's easy to fit in before you go to work. And the members often go somewhere for coffee afterwards, so it's quite a social event. *Q7*

WOMAN: OK. That sounds good. I've only just moved to the city so I don't actually know many people yet.

JIM: Well, it's a great way to meet people.

WOMAN: And does each ride have a leader?

JIM: Sometimes, but not always. But you don't really need one; the group members on the ride support one another, anyway. *Q8*

WOMAN: How would we know where to go?

JIM: If you check the club website, you'll see that the route for each ride is clearly marked. So you can just print that out and take it along with you. It's similar from one week to another, but it's not always exactly the same. *Q9*

WOMAN: And what do I need to bring?

JIM: Well, bring a bottle of water, and your phone. You shouldn't use it while you're cycling, but have it with you.

WOMAN: Right.

JIM: And in winter, it's well before sunrise when we set out, so you need to make sure your bike's got lights. *Q10*

WOMAN: That's OK. Well, thanks Jim. I'd definitely like to join. So what's the best way of going about it?

JIM: You can ...

SECTION 2

Thanks for coming everyone. OK, so this meeting is for new staff and staff who haven't been involved with our volunteering projects yet. So basically, the idea is that we allow staff to give up some of their work time to help on various charity projects to benefit the local community. We've been doing this for the last five years and it's been very successful.

Participating doesn't necessarily involve a huge time commitment. The company will pay for eight hours of your time. That can be used over one or two days all at once, or spread over several months throughout the year. There are some staff who enjoy volunteering so much they also give up their own free time for a couple of hours every week. It's completely up to you. Obviously, many people will have family commitments and aren't as available as other members of staff. *Q11*

Feedback from staff has been overwhelmingly positive. Because they felt they were doing something really useful, nearly everyone agreed that volunteering made them feel more motivated at work. They also liked building relationships with the people in the local community and felt valued by them. One or two people also said it was a good thing to have on their CVs. *Q12*

One particularly successful project last year was the Get Working Project. This was aimed at helping unemployed people in the area get back to work. Our staff were able to help them improve their telephone skills, such as writing down messages and speaking with confidence to potential customers, which they had found quite difficult. This is something many employers look for in job applicants – and something we all do without even thinking about, every day at work. *Q13*

We've got an exciting new project starting this year. Up until now, we've mainly focused on projects to do with education and training. And we'll continue with our reading project in schools and our work with local charities. But we've also agreed to help out on a conservation project in Redfern Park. So if any of you fancy being outside and getting your hands dirty, this is the project for you. *Q14*

I also want to mention the annual Digital Inclusion Day, which is coming up next month. The aim of this is to help older people keep up with technology. And this year, instead of hosting the event in our own training facility, we're using the ICT suite at Hill College, as it can hold far more people. *Q15*

We've invited over 60 people from the Silver Age Community Centre to take part, so we'll need a lot of volunteers to help with this event.

If you're interested in taking part, please go to the volunteering section of our website and complete the relevant form. We won't be providing any training for this but you'll be paired with an experienced volunteer if you've never done it before. By the way, don't forget to tell your manager about any volunteering activities you decide to do. *Q16*

The participants on the Digital Inclusion Day really benefited. The majority were in their seventies, though some were younger and a few were even in their nineties! Quite a few owned both a computer and a mobile phone, but these tended to be outdated models. *Q17* They generally knew how to do simple things, like send texts, but weren't aware of recent developments in mobile phone technology. A few were keen to learn but most were quite dismissive at first – they couldn't see the point of updating their skills. *Q18* But that soon changed.

The feedback was very positive. The really encouraging thing was that participants all said they felt much more confident about using social media to keep in touch with their grandchildren, who prefer this form of communication to phoning or sending emails. *Q19* A lot of them also said playing online games would help them make new friends and keep their brains active. *Q20* They weren't that impressed with being able to order their groceries online, as they liked going out to the shops, but some said it would come in handy if they were ill or the weather was really bad. One thing they asked about was using tablets for things like reading newspapers – some people had been given tablets as presents but had never used them, so that's something we'll make sure we include this time ...

SECTION 3

TUTOR: Ah ... come in, Russ.

RUSS: Thank you.

TUTOR: Now you wanted to consult me about your class presentation on nanotechnology – you're due to give it in next week, aren't you?

RUSS: That's right. And I'm really struggling. I chose the topic because I didn't know much about it and wanted to learn more, but now I've read so much about it, in a way there's too much to say – I could talk for much longer than the twenty minutes I've been allocated. Should I assume the other students don't know much, and give them a kind of general introduction, or should I try and make them share my fascination with a particular aspect? *Q21*

TUTOR: You could do either, but you'll need to have it clear in your own mind.

RUSS: Then I think I'll give an overview.

TUTOR: OK. Now, one way of approaching this is to work through developments in chronological order.

RUSS: Uh-huh.

TUTOR: On the other hand, you could talk about the numerous ways that nanotechnology is being applied.

RUSS: You mean things like thin films on camera displays to make them water-repellent, and additives to make motorcycle helmets stronger and lighter.

TUTOR: Exactly. Or another way would be to focus on its impact in one particular area, say medicine, or space exploration. *Q22*

RUSS: That would make it easier to focus. Perhaps I should do that.

TUTOR: I think that would be a good idea.

RUSS: Right. How important is it to include slides in the presentation?

TUTOR: They aren't essential, by any means. And there's a danger of tailoring what you say to fit whatever slides you can find. While it can be good to include slides, you could end up spending too long looking for suitable ones. You might find it better to leave them out. *Q23*

RUSS: I see. Another thing I was wondering about was how to start. I know presentations often begin with 'First I'm going to talk about this, and then I'll talk about that', but I thought about asking the audience what they know about nanotechnology.

TUTOR: That would be fine if you had an hour or two for the presentation, but you might find that you can't do anything with the answers you get, and it simply eats into the short time that's available.

RUSS: So, maybe I should mention a particular way that nanotechnology is used, to focus people's attention. *Q24*

TUTOR: That sounds sensible.

RUSS: What do you think I should do next? I really have to plan the presentation today and tomorrow.

TUTOR: Well, initially I think you should ignore all the notes you've made, take a small piece of paper, and write a single short sentence that ties together the whole presentation: it can be something as simple as 'Nanotechnology is already improving our lives'. Then start planning the content around that. You can always modify that sentence later, if you need to. *Q25*

RUSS: OK.

TUTOR: OK, now let's think about actually giving the presentation. You've only given one before, if I remember correctly, about an experiment you'd been involved in.

RUSS: That's right. It was pretty rubbish!

TUTOR: Let's say it was better in some respects than in others. With regard to the structure, I felt that you ended rather abruptly, without rounding it off. Be careful not to do that in next week's presentation. *Q26*

RUSS: OK.

TUTOR: And you made very little eye contact with the audience, because you were looking down at your notes most of the time. You need to be looking at the audience and only occasionally glancing at your notes. *Q27*

RUSS: Mmm.

TUTOR: Your body language was a little odd. Every time you showed a slide, you turned your back on the audience so you could look at it – you should have been looking at your laptop. And you kept scratching your head, so I found myself wondering when you were next going to do that, instead of listening to what you were saying! *Q28*

RUSS: Oh dear. What did you think of the language? I knew that not everyone was familiar with the subject, so I tried to make it as simple as I could.

TUTOR: Yes, that came across. You used a few words that are specific to the field, but you always explained what they meant, so the audience wouldn't have had any difficulty understanding. *Q29*

RUSS: Uh-huh.
TUTOR: I must say the handouts you prepared were well thought out. They were a good summary of your presentation, which people would be able to refer to later on. So well done on that. *Q30*
RUSS: Thank you.
TUTOR: Well, I hope that helps you with next week's presentation.
RUSS: Yes, it will. Thanks a lot.
TUTOR: I'll look forward to seeing a big improvement, then.

SECTION 4

Today, we'll be continuing the series of lectures on memory by focusing on what is called episodic memory and what can happen if this is not working properly.

Episodic memory refers to the memory of an event or 'episode'. Episodic memories allow us to mentally travel back in time to an event from the past. Episodic memories include various details about these events, for example, when an event happened and other information such as the location. *Q31* To help understand this concept, try to remember the last time you ate dinner at a restaurant. The ability to remember where you ate, who you were with and the items you ordered are all features of an episodic memory.

Episodic memory is distinct from another type of memory called semantic memory. This is the type of factual memory that we have in common with everyone else – that is your general knowledge of the world. *Q32* To build upon a previous example, remembering where you parked your car is an example of episodic memory, but your understanding of what a car is and how an engine works are examples of semantic memory. Unlike episodic memory, semantic memory isn't dependent on recalling personal experiences. *Q33*

Episodic memory can be thought of as a process with several different steps of memory processing: encoding, consolidation and retrieval.

The initial step is called encoding. This involves the process of receiving and registering information, which is necessary for creating memories of information or events that you experience. The degree to which you can successfully encode information depends on the level of attention you give to an event while it's actually happening. *Q34* Being distracted can make effective encoding very difficult. Encoding of episodic memories is also influenced by how you process the event. For example, if you were introduced to someone called Charlie, you might make the connection that your uncle has the same name. *Q35* Future recollection of Charlie's name is much easier if you have a strategy to help you encode it.

Memory consolidation, the next step in forming an episodic memory, is the process by which memories of encoded information are strengthened, stabilised and stored to facilitate later retrieval. Consolidation is most effective when the information being stored can be linked to an existing network of information. *Q36* Consolidation makes it possible for you to store memories for later retrieval indefinitely. Forming strong memories depends on the frequency with which you try to retrieve them. *Q37* Memories can fade or become harder to retrieve if they aren't used very often.

The last step in forming episodic memories is called retrieval, which is the conscious recollection of encoded information. Retrieving information from episodic memory depends upon semantic, olfactory, auditory and visual factors. These help episodic memory retrieval by acting as a prompt. *Q38* For example, when recalling where you parked your car you may use the colour of a sign close to where you parked. You actually have to mentally travel back to the moment you parked.

There are a wide range of neurological diseases and conditions that can affect episodic memory. These range from Alzheimer's to schizophrenia to autism. An impairment of episodic memory can have a profound effect on individuals' lives. For example, the symptoms of schizophrenia can be reasonably well controlled by medication; however, patients' episodic memory may still be impaired and so they are often unable to return to university or work. Recent studies have shown that computer-assisted games designed to keep the brain active can help improve their episodic memory. *Q39*

Episodic memories can help people connect with others, for instance by sharing intimate details about their past; something individuals with autism often have problems with. This may be caused by an absence of a sense of self. This is essential for the storage of episodic memory, and has been found to be impaired in children with autism. Research has shown that treatments that improve memory may also have a positive impact on children's social development. *Q40*

One study looked at a ...

TEST 3

SECTION 1

LINDA: Hello, Linda speaking.

MATT: Oh hi, Linda. This is Matt Brooks. Alex White gave me your number. He said you'd be able to give me some advice about moving to Banford.

LINDA: Yes, Alex did mention you. How can I help?

MATT: Well, first of all – which area to live in?

LINDA: Well, I live in Dalton, which is a really nice suburb – not too expensive, and there's a nice park. *Example*

MATT: Sounds good. Do you know how much it would be to rent a two bedroom flat there?

LINDA: Yeah, you should be able to get something reasonable for 850 pounds per month. That's what people typically pay. You certainly wouldn't want to pay more than 900 pounds. That doesn't include bills or anything. *Q1*

MATT: No. That sounds alright. I'll definitely have a look there. Are the transport links easy from where you live?

LINDA: Well, I'm very lucky. I work in the city centre so I don't have to use public transport. I go by bike. *Q2*

MATT: Oh, I wish I could do that. Is it safe to cycle around the city?

LINDA: Yes, it's fine. And it keeps me fit. Anyway, driving to work in the city centre would be a nightmare because there's hardly any parking. *Q3* And the traffic during the rush hour can be bad.

MATT: I'd be working from home but I'd have to go to London one or two days a week.

LINDA: Oh, that's perfect. Getting to London is no problem. There's a fast train every 30 minutes which only takes 45 minutes. *Q4*

MATT: That's good.

LINDA: Yeah, the train service isn't bad during the week. And they run quite late at night. It's weekends that are a problem. *Q5* They're always doing engineering work and you have to take a bus to Hadham and pick up the train there, which is really slow. But other than that, Banford's a great place to live. I've never been happier.

LINDA: There are some nice restaurants in the city centre and a brand new cinema which has only been open a couple of months. *Q6* There's a good arts centre too.

MATT: Sounds like Banford's got it all.

LINDA: Yes! We're really lucky. There are lots of really good aspects to living here. The schools are good and the hospital here is one of the best in the country. *Q7* Everyone I know who's been there's had a positive experience. Oh, I can give you the name of my dentist too in Bridge Street, *Q8* if you're interested. I've been going to him for years and I've never had any problems.

MATT: Oh, OK. Thanks!

LINDA: I'll find his number and send it to you.

MATT: Thanks, that would be really helpful.

LINDA: Are you planning to visit Banford soon?

MATT: Yes. My wife and I are both coming next week. We want to make some appointments with estate agents.

LINDA: I could meet you if you like and show you around.

MATT: Are you sure? We'd really appreciate that.

LINDA: Either a Tuesday or Thursday is good for me, after 5.30. *Q9*

MATT: Thursday's preferable – Tuesday I need to get home before 6 pm.

SECTION 3

TUTOR: OK, Jim. You wanted to see me about your textile design project.

JIM: That's right. I've been looking at how a range of natural dyes can be used to colour fabrics like cotton and wool.

TUTOR: Why did you choose that topic?

JIM: Well, I got a lot of useful ideas from the museum, you know, at that exhibition of textiles. But I've always been interested in anything to do with colour. Years ago, I went to a carpet shop with my parents when we were on holiday in Turkey, and I remember all the amazing colours. *Q21*

TUTOR: They might not all have been natural dyes.

JIM: Maybe not, but for the project I decided to follow it up. And I found a great book about a botanic garden in California that specialises in plants used for dyes.

TUTOR: OK. So, in your project, you had to include a practical investigation.

JIM: Yeah. At first I couldn't decide on my variables. I was going to just look at one type of fibre for example, like cotton ...

TUTOR: ... and see how different types of dyes affected it?

JIM: Yes. Then I decided to include others as well, so I looked at cotton and wool and nylon. *Q22*

TUTOR: With just one type of dye?

JIM: Various types, including some that weren't natural, for comparison.

TUTOR: OK.

JIM: So, I did the experiments last week. I used some ready-made natural dyes, I found a website which supplied them, they came in just a few days, but I also made some of my own.

TUTOR: That must have taken quite a bit of time.

JIM: Yes, I'd thought it'd just be a matter of a teaspoon or so of dye, and actually that wasn't the case at all. Like I was using one vegetable, beetroot, for a red dye, and I had to chop up a whole pile of it. So it all took longer than I'd expected. *Q23*

TUTOR: One possibility is to use food colourings.

JIM: I did use one. That was a yellow dye, an artificial one.

TUTOR: Tartrazine?

JIM: Yeah. I used it on cotton first. It came out a great colour, but when I rinsed the material, the colour just washed away. I'd been going to try it out on nylon, but I abandoned that idea. *Q24*

TUTOR: Were you worried about health issues?

JIM: I'd thought if it's a legal food colouring, it must be safe.

TUTOR: Well, it can occasionally cause allergic reactions, I believe.

TUTOR: So what natural dyes did you look at?

JIM: Well, one was turmeric. The colour's great, it's a really strong yellow. It's generally used in dishes like curry.

TUTOR: It's meant to be quite good for your health when eaten, but you might find it's not permanent when it's used as a dye – a few washes, and it's gone. *Q25*

JIM: Right. I used beetroot as a dye for wool. When I chop up beetroot to eat I always end up with bright red hands, but the wool ended up just a sort of watery cream shade. Disappointing. *Q26*

TUTOR: There's a natural dye called Tyrian purple. Have you heard of that?

JIM: Yes. It comes from a shellfish, and it was worn in ancient times but only by important people as it was so rare. I didn't use it. *Q27*

TUTOR: It fell out of use centuries ago, though one researcher managed to get hold of some recently. But that shade of purple can be produced by chemical dyes nowadays. Did you use any black dyes?

JIM: Logwood. That was quite complicated. I had to prepare the fabric so the dye would take.

TUTOR: I hope you were careful to wear gloves.

JIM: Yes. I know the danger with that dye.

TUTOR: Good. It can be extremely dangerous if it's ingested. Now, presumably you had a look at an insect-based dye? Like cochineal, for example? *Q28*

JIM: Yes. I didn't actually make that, I didn't have time to start crushing up insects to get the red colour and anyway they're not available here, but I managed to get the dye quite easily from a website. But it cost a fortune. I can see why it's generally just used in cooking, and in small quantities. *Q29*

TUTOR: Yes, it's very effective, but that's precisely why it's not used as a dye.

JIM: I also read about using metal oxide. Apparently you can allow iron to rust while it's in contact with the fabric, and that colours it.

TUTOR: Yes, that works well for dying cotton. But you have to be careful as the metal can actually affect the fabric and so you can't expect to get a lot of wear out of fabrics treated in this way. And the colours are quite subtle, not everyone likes them. Anyway, it looks as if you've done a lot of work … *Q30*

SECTION 4

Last week, we started looking at reptiles, including crocodiles and snakes. Today, I'd like us to have a look at another reptile – the lizard – and in particular, at some studies that have been done on a particular type of lizard whose Latin name is *tiliqua rugosa*. This is commonly known as the sleepy lizard, because it's quite slow in its movements and spends quite a lot of its time dozing under rocks or lying in the sun.

I'll start with a general description. Sleepy lizards live in Western and South Australia, where they're quite common. Unlike European lizards, which are mostly small, green and fast-moving, sleepy lizards are brown, but what's particularly distinctive about them is the colour of their tongue, which is dark blue, in contrast with the lining of their mouth which is bright pink. *Q31* And they're much bigger than most European lizards. They have quite a varied diet, including insects and even small animals, but they mostly eat plants of varying kinds. *Q32*

Even though they're quite large and powerful, with strong jaws that can crush beetles and snail shells, they still have quite a few predators. Large birds like cassowaries were one of the main ones in the past, but nowadays they're more likely to be caught and killed by snakes. *Q33* Actually, another threat to their survival isn't a predator at all, but is man-made – quite a large number of sleepy lizards are killed by cars when they're trying to cross highways.

One study carried out by Michael Freake at Flinders University investigated the methods of navigation of these lizards. Though they move slowly, they can travel quite long distances. And he found that even if they were taken some distance away from their home territory, they could usually find their way back home as long as they could see the sky – they didn't need any other landmarks on the ground. *Q34*

Observations of these lizards in the wild have also revealed that their mating habits are quite unusual. Unlike most animals, it seems that they're relatively monogamous, returning to the same partner year after year. *Q35* And the male and female also stay together for a long time, both before and after the birth of their young.

It's quite interesting to think about the possible reasons for this. It could be that it's to do with protecting their young – you'd expect them to have a much better chance of survival if they have both parents around. But in fact observers have noted that once the babies have

hatched out of their eggs, they have hardly any contact with their parents. So, there's not really any evidence to support that idea. *Q36*

Another suggestion's based on the observation that male lizards in monogamous relationships tend to be bigger and stronger than other males. So maybe the male lizards stay around so they can give the female lizards protection from other males. But again, we're not really sure. *Q37*

Finally, I'd like to mention another study that involved collecting data by tracking the lizards. I was actually involved in this myself. So we caught some lizards in the wild and we developed a tiny GPS system that would allow us to track them, and we fixed this onto their tails. Then we set the lizards free again, and we were able to track them for twelve days and gather data, not just about their location, but even about how many steps they took during this period. *Q38* *Q39*

One surprising thing we discovered from this is that there were far fewer meetings between lizards than we expected – it seems that they were actually trying to avoid one another. So why would that be? Well, again we have no clear evidence, but one hypothesis is that male lizards can cause quite serious injuries to one another, so maybe this avoidance is a way of preventing this – of self-preservation, if you like. But we need to collect a lot more data before we can be sure of any of this. *Q40*

TEST 4

SECTION 1

MARTHA:	Hi Alex. It's Martha Clines here. James White gave me your number. I hope you don't mind me calling you.	
ALEX:	Of course not. How are you, Martha?	
MARTHA:	Good thanks. I'm ringing because I need a bit of advice.	
ALEX:	Oh yeah. What about?	
MARTHA:	The training you did at JPNW a few years ago. I'm applying for the same thing.	
ALEX:	Oh right. Yes, I did mine in 2014. Best thing I ever did. I'm still working there.	*Example*
MARTHA:	Really? What are you doing?	
ALEX:	Well, now I work in the customer services department but I did my initial training in Finance. I stayed there for the first two years and then moved to where I am now.	*Q1*
MARTHA:	That's the same department I'm applying for. Did you enjoy it?	
ALEX:	I was pretty nervous to begin with. I didn't do well in my exams at school and I was really worried because I failed Maths. But it didn't actually matter because I did lots of courses on the job.	*Q2*
MARTHA:	Did you get a diploma at the end of your trainee period? I'm hoping to do the one in business skills.	
ALEX:	Yes. That sounds good. I took the one on IT skills but I wish I'd done that one instead.	*Q3*
MARTHA:	OK, that's good to know. What about the other trainees? How did you get on with them?	
ALEX:	There were about 20 of us who started at the same time and we were all around the same age – I was 18 and there was only one person younger than me, who was 17. The rest were between 18 and 20. I made some good friends.	*Q4*
MARTHA:	I've heard lots of good things about the training at JPNW. It seems like there are a lot of opportunities there.	
ALEX:	Yeah, definitely. Because of its size you can work in loads of different areas within the organisation.	
MARTHA:	What about pay? I know you get a lower minimum wage than regular employees.	
ALEX:	That's right – which isn't great. But you get the same number of days' holiday as everyone else. And the pay goes up massively if they offer you a job at the end of the training period.	*Q5*
MARTHA:	Yeah, but I'm not doing it for the money – it's the experience I think will be really useful. Everyone says by the end of the year you gain so much confidence.	
ALEX:	You're right. That's the most useful part about it. There's a lot of variety too. You're given lots of different things to do. I enjoyed it all – I didn't even mind the studying.	
MARTHA:	Do you have to spend any time in college?	
ALEX:	Yes, one day each month. So you get lots of support from both your tutor and your manager.	*Q6*
MARTHA:	That's good. And the company is easy to get to, isn't it?	
ALEX:	Yes, it's very close to the train station so the location's a real advantage.	*Q7*

ALEX:	Have you got a date for your interview yet?
MARTHA:	Yes, it's on the 23rd of this month.
ALEX:	So long as you're well prepared there's nothing to worry about. Everyone's very friendly.

MARTHA: I am not sure what I should wear. What do you think?

ALEX: Nothing too casual – like jeans, for example. If you've got a nice jacket, wear that with a skirt or trousers. *Q8*

MARTHA: OK. Thanks. Any other tips?

ALEX: Erm, well I know it's really obvious but arrive in plenty of time. They hate people who are late. So make sure you know exactly where you have to get to. *Q9* And one other useful piece of advice my manager told me before I had the interview for this job – is to smile. *Q10* Even if you feel terrified. It makes people respond better to you.

MARTHA: I'll have to practise doing that in the mirror!

ALEX: Yeah – well, good luck. Let me know if you need any more information.

MARTHA: Thanks very much.

SECTION 2

Hi everyone, welcome to the Snow Centre. My name's Annie. I hope you enjoyed the bus trip from the airport – we've certainly got plenty of snow today! Well, you've come to New Zealand's premier snow and ski centre, and we've a whole load of activities for you during your week here.

Most visitors come here for the cross-country skiing, where you're on fairly flat ground for most of the time, rather than going down steep mountainsides. There are marked trails, but you can also leave these and go off on your own and that's an experience not to be missed. *Q11* You can go at your own speed – it's great aerobic exercise if you really push yourself, or if you prefer you can just glide gently along and enjoy the beautiful scenery.

This afternoon, you'll be going on a dog-sled trip. You may have seen our dogs on TV recently racing in the winter sled festival. If you want, you can have your own team for the afternoon and learn how to drive them, *Q12* following behind our leader on the trail. Or if you'd prefer, you can just sit back in the sled and enjoy the ride as a passenger.

At the weekend, we have the team relay event, and you're all welcome to join in. We have a local school coming along, and a lot of the teachers are taking part too. Participation rather than winning is the main focus, and there's a medal for everyone who takes part. *Q13* Participants are in teams of two to four, and each team must complete four laps of the course.

For your final expedition, you'll head off to Mount Frenner wearing a pair of special snow shoes which allow you to walk on top of the snow. This is an area where miners once searched for gold, though there are very few traces of their work left now. When the snow melts in summer, the mountain slopes are carpeted in flowers and plants. It's a long ascent, *Q14* though not too steep, and walkers generally take a couple of days to get to the summit and return.

You'll spend the night in our hut half-way up the mountain. That's included in your package for the stay. It's got cooking facilities, firewood and water for drinking. *Q15* For washing, we recommend you use melted snow, though, to conserve supplies. We can take your luggage up on our snowmobile for you for just ten dollars a person. The hut has cooking facilities so you can make a hot meal in the evening and morning, but you need to take your own food.

The weather on Mount Frenner can be very stormy. In that case, stay in the hut – generally the storms don't last long. *Q16* Don't stress about getting back here to the centre in time to catch the airport bus – they'll probably not be running anyway. We do have an emergency locator beacon in the hut but only use that if it's a real emergency, like if someone's ill or injured.

Now, let me tell you something about the different ski trails you can follow during your stay here.

Highland Trail's directly accessible from where we are now. This trail's been designed to give first-timers an experience they'll enjoy regardless of their age or skill, but it's also ideal for experts to practise their technique. *Q17*

Then there's Pine Trail ... if you're nervous about skiing, leave this one to the experts! You follow a steep valley looking right down on the river below – scary! But if you've fully mastered the techniques needed for hills, it's great fun. *Q18*

Stony Trail's a good choice once you've got a general idea of the basics. There are one or two tricky sections, but nothing too challenging. There's a shelter half-way where you can sit and take a break and enjoy the afternoon sunshine. *Q19*

And finally, Loser's Trail. This starts off following a gentle river valley but the last part is quite exposed so the snow conditions can be challenging – if it's snowing or windy, check with us before you set out to make sure the trail's open that day. *Q20*

Right, so now if you'd like to follow me, we'll get started ...

SECTION 3

JACK: I've still got loads to do for our report on nutritional food labels.

ALICE: Me too. What did you learn from doing the project about your own shopping habits?

JACK: Well, I've always had to check labels for traces of peanuts in everything I eat because of my allergy. But beyond that I've never really been concerned enough to check how healthy a product is. *Q21*

ALICE: This project has actually taught me to read the labels much more carefully. I tended to believe claims on packaging like 'low in fat'. But I now realise that the 'healthy' yoghurt I've bought for years is full of sugar and that it's actually quite high in calories. *Q22*

JACK: Ready meals are the worst ... comparing the labels on supermarket pizzas was a real eye-opener. Did you have any idea how many calories they contain? I was amazed.

ALICE: Yes, because unless you read the label really carefully, you wouldn't know that the nutritional values given are for half a pizza. *Q23*

JACK: When most people eat the whole pizza. Not exactly transparent is it?

ALICE: Not at all. But I expect it won't stop you from buying pizza?

JACK: Probably not, no! I thought comparing the different labelling systems used by food manufacturers was interesting. I think the kind of labelling system used makes a big difference.

ALICE: Which one did you prefer?

JACK: I liked the traditional daily value system best – the one which tells you what proportion of your required daily intake of each ingredient the product contains. I'm not sure it's the easiest for people to use but at least you get the full story. I like to know all the ingredients in a product – not just how much fat, salt and sugar they contain. *Q24*

ALICE: But it's good supermarkets have been making an effort to provide reliable information for customers.

JACK: Yes. There just needs to be more consistency between labelling systems used by different supermarkets, in terms of portion sizes, etc.

ALICE: Mmm. The labels on the different brands of chicken flavour crisps were quite revealing too, weren't they?

JACK: Yeah. I don't understand how they can get away with calling them chicken flavour when they only contain artificial additives. *Q25*

ALICE: I know. I'd at least have expected them to contain a small percentage of real chicken.
JACK: Absolutely.
ALICE: I think having nutritional food labeling has been a good idea, don't you? I think it will change people's behaviour and stop mothers, in particular, buying the wrong things.
JACK: But didn't that study kind of prove the opposite? People didn't necessarily stop buying unhealthy products.
ALICE: They only said that might be the case. Those findings weren't that conclusive and it was quite a small-scale study. I think more research has to be done. *Q26*
JACK: Yes, I think you're probably right.

JACK: What do you think of the traffic-light system?
ALICE: I think supermarkets like the idea of having a colour-coded system – red, orange or green – for levels of fat, sugar and salt in a product.
JACK: But it's not been adopted universally. And not on all products. Why do you suppose that is? *Q27 & Q28*
ALICE: Pressure from the food manufacturers. Hardly surprising that some of them are opposed to flagging up how unhealthy their products are.
JACK: I'd have thought it would have been compulsory. It seems ridiculous it isn't.
ALICE: I know. And what I couldn't get over is the fact that it was brought in without enough consultation – a lot of experts had deep reservations about it.
JACK: That is a bit weird. I suppose there's an argument for doing the research now when consumers are familiar with this system.
ALICE: Yeah, maybe.
JACK: The participants in the survey were quite positive about the traffic-light system.
ALICE: Mmm. But I don't think they targeted the right people. They should have focused on people with low literacy levels because these labels are designed to be accessible to them.
JACK: Yeah. But it's good to get feedback from all socio-economic groups. And there wasn't much variation in their responses. *Q29 & Q30*
ALICE: No. But if they hadn't interviewed participants face-to-face, they could have used a much bigger sample size. I wonder why they chose that method?
JACK: Dunno. How were they selected? Did they volunteer or were they approached?
ALICE: I think they volunteered. The thing that wasn't stated was how often they bought packaged food – all we know is how frequently they used the supermarket.

SECTION 4

In my presentation, I'm going to talk about coffee, and its importance both in economic and social terms. We think it was first drunk in the Arab world, but there's hardly any documentary evidence of it before the 1500s, although of course that doesn't mean that people didn't know about it before then.

However, there is evidence that coffee was originally gathered from bushes growing wild in Ethiopia, in the northeast of Africa. In the early sixteenth century, it was being bought by traders, and gradually its use as a drink spread throughout the Middle East. It's also known that in 1522, in the Turkish city of Constantinople, which was the centre of the Ottoman Empire, the court physician approved its use as a medicine.

By the mid-1500s, coffee bushes were being cultivated in the Yemen and for the next hundred years this region produced most of the coffee drunk in Africa and the Arab world. What's particularly interesting about coffee is its effect on social life. It was rarely drunk at home, but instead people went to coffee houses to drink it. These people, usually men, would

meet to drink coffee and chat about issues of the day. But at the time, this chance to share ideas and opinions was seen as something that was potentially dangerous, and in 1623 *Q31* the ruler of Constantinople demanded the destruction of all the coffee houses in the city, although after his death many new ones opened, and coffee consumption continued. In the seventeenth century, coffee drinking spread to Europe, and here too coffee shops became *Q32* places where ordinary people, nearly always men, could meet to exchange ideas. Because of this, some people said that these places performed a similar function to universities. The opportunity they provided for people to meet together outside their own homes and to discuss the topics of the day had an enormous impact on social life, and many social movements and *Q33* political developments had their origins in coffee house discussions.

In the late 1600s, the Yemeni monopoly on coffee production broke down and coffee production started to spread around the world, helped by European colonisation. Europeans set up coffee plantations in Indonesia and the Caribbean and production of coffee in the colonies skyrocketed. Different types of coffee were produced in different areas, and it's *Q34* interesting that the names given to these different types, like Mocha or Java coffee, were often taken from the port they were shipped to Europe from. But if you look at the labour system in the different colonies, there were some significant differences.

In Brazil and the various Caribbean colonies, coffee was grown in huge plantations and the *Q35* workers there were almost all slaves. But this wasn't the same in all colonies; for example in Java, which had been colonised by the Dutch, the peasants grew coffee and passed *Q36* a proportion of this on to the Dutch, so it was used as a means of taxation. But whatever system was used, under the European powers of the eighteenth century, coffee production was very closely linked to colonisation. Coffee was grown in ever-increasing quantities *Q37* to satisfy the growing demand from Europe, and it became nearly as important as sugar production, which was grown under very similar conditions. However, coffee prices were not yet low enough for people to drink it regularly at home, so most coffee consumption still took place in public coffee houses and it still remained something of a luxury item. In Britain, however, a new drink was introduced from China, and started to become popular, gradually taking over from coffee, although at first it was so expensive that only the upper classes could afford it. This was tea, and by the late 1700s it was being widely drunk. However, when the *Q38* USA gained independence from Britain in 1776, they identified this drink with Britain, and coffee remained the preferred drink in the USA, as it still is today.

So, by the early nineteenth century, coffee was already being widely produced and consumed. But during this century, production boomed and coffee prices started to fall. This *Q39* was partly because new types of transportation had been developed which were cheaper and more efficient. So now, working people could afford to buy coffee – it wasn't just a drink for the middle classes. And this was at a time when large parts of Europe were starting to work in industries. And sometimes this meant their work didn't stop when it got dark; they might have *Q40* to continue throughout the night. So, the use of coffee as a stimulant became important – it wasn't just a drink people drank in the morning, for breakfast.

There were also changes in cultivation ...

Listening and Reading Answer Keys

TEST 1

LISTENING

Section 1, Questions 1–10

1 choose
2 private
3 20 / twenty percent
4 healthy
5 bones
6 lecture
7 Arretsa
8 vegetarian
9 market
10 knife

Section 2, Questions 11–20

11 B
12 C
13 B
14 E
15 D
16 B
17 G
18 C
19 H
20 I

Section 3, Questions 21–30

21 A
22 C
23 B
24 C
25 B
26 G
27 C
28 H
29 A
30 E

Section 4, Questions 31–40

31 crow
32 cliffs
33 speed
34 brain(s)
35 food
36 behaviour(s) / behavior(s)
37 new
38 stress
39 tail(s)
40 permanent

If you score ...

0–16	17–25	26–40
you are unlikely to get an acceptable score under examination conditions and we recommend that you spend a lot of time improving your English before you take IELTS.	you may get an acceptable score under examination conditions but we recommend that you think about having more practice or lessons before you take IELTS.	you are likely to get an acceptable score under examination conditions but remember that different institutions will find different scores acceptable.

TEST 1

READING

Reading Passage 1, Questions 1–13

1 update
2 environment
3 captain
4 films
5 season
6 accommodation
7 blog
8 FALSE
9 NOT GIVEN
10 FALSE
11 TRUE
12 NOT GIVEN
13 TRUE

Reading Passage 2, Questions 14–26

14 iv
15 vi
16 i
17 v
18 viii
19 iii
20 E
21 B
22 D
23 A
24 focus
25 pleasure
26 curiosity

Reading Passage 3, Questions 27–40

27 B
28 C
29 C
30 D
31 A
32 D
33 A
34 E
35 C
36 G
37 B
38 YES
39 NOT GIVEN
40 NO

If you score ...

0–16	17–25	26–40
you are unlikely to get an acceptable score under examination conditions and we recommend that you spend a lot of time improving your English before you take IELTS.	you may get an acceptable score under examination conditions but we recommend that you think about having more practice or lessons before you take IELTS.	you are likely to get an acceptable score under examination conditions but remember that different institutions will find different scores acceptable.

TEST 2

LISTENING

Section 1, Questions 1–10

1 races
2 insurance
3 Jerriz
4 25 / twenty-five
5 stadium
6 park
7 coffee
8 leader
9 route
10 lights

Section 2, Questions 11–20

11 C
12 B
13 C
14 B
15 B
16 A
17&18 *IN EITHER ORDER*
C
E
19&20 *IN EITHER ORDER*
B
D

Section 3, Questions 21–30

21 B
22 A
23 C
24 C
25 A
26 A
27 C
28 D
29 G
30 B

Section 4, Questions 31–40

31 location
32 world
33 personal
34 attention
35 name
36 network
37 frequency
38 colour / color
39 brain
40 self

If you score ...

0–17	18–26	27–40
you are unlikely to get an acceptable score under examination conditions and we recommend that you spend a lot of time improving your English before you take IELTS.	you may get an acceptable score under examination conditions but we recommend that you think about having more practice or lessons before you take IELTS.	you are likely to get an acceptable score under examination conditions but remember that different institutions will find different scores acceptable.

TEST 2

READING

Reading Passage 1, Questions 1–13

1 oils
2 friendship
3 funerals
4 wealth
5 indigestion
6 India
7 camels
8 Alexandria
9 Venice
10 TRUE
11 FALSE
12 NOT GIVEN
13 FALSE

Reading Passage 2, Questions 14–26

14 B
15 F
16 B
17 E
18 A
19 B
20 C
21 animals
22 childbirth
23 placebo
24 game
25 strangers
26 names

Reading Passage 3, Questions 27–40

27 D
28 C
29 A
30 D
31 D
32 D
33 C
34 B
35 A
36 C
37 A
38 B
39 C
40 D

If you score ...

0–15	16–23	24–40
you are unlikely to get an acceptable score under examination conditions and we recommend that you spend a lot of time improving your English before you take IELTS.	you may get an acceptable score under examination conditions but we recommend that you think about having more practice or lessons before you take IELTS.	you are likely to get an acceptable score under examination conditions but remember that different institutions will find different scores acceptable.

TEST 3

LISTENING

Section 1, Questions 1–10

1 850
2 bike / bicycle
3 parking
4 30 / thirty
5 weekend(s)
6 cinema
7 hospital
8 dentist
9 Thursday
10 café

Section 2, Questions 11–20

11 F
12 D
13 A
14 B
15 C
16 G
17&18 *IN EITHER ORDER*
B
C
19&20 *IN EITHER ORDER*
B
D

Section 3, Questions 21–30

21 C
22 A
23 A
24 B
25 C
26 F
27 H
28 D
29 A
30 E

Section 4, Questions 31–40

31 tongue(s)
32 plants
33 snakes
34 sky
35 partner(s)
36 contact
37 protection
38 tail(s)
39 steps
40 injury / injuries

If you score ...

0–17	18–26	27–40
you are unlikely to get an acceptable score under examination conditions and we recommend that you spend a lot of time improving your English before you take IELTS.	you may get an acceptable score under examination conditions but we recommend that you think about having more practice or lessons before you take IELTS.	you are likely to get an acceptable score under examination conditions but remember that different institutions will find different scores acceptable.

TEST 3

READING

Reading Passage 1, Questions 1–13

1 furniture
2 sugar
3 ropes
4 charcoal
5 bowls
6 hormones
7 cosmetics
8 dynamite
9 FALSE
10 FALSE
11 NOT GIVEN
12 TRUE
13 NOT GIVEN

Reading Passage 2, Questions 14–26

14 B
15 C
16 A
17 B
18 recording devices
19 fathers / dads
20 bridge hypothesis
21 repertoire
22 (audio-recording) vests
23 vocabulary
24 F
25 A
26 E

Reading Passage 3, Questions 27–40

27 C
28 H
29 A
30 B
31 D
32 shells
33 lake
34 rainfall
35 grains
36 pottery
37 B
38 A
39 D
40 A

If you score ...

0–16	17–24	25–40
you are unlikely to get an acceptable score under examination conditions and we recommend that you spend a lot of time improving your English before you take IELTS.	you may get an acceptable score under examination conditions but we recommend that you think about having more practice or lessons before you take IELTS.	you are likely to get an acceptable score under examination conditions but remember that different institutions will find different scores acceptable.

TEST 4

LISTENING

Section 1, Questions 1–10

1 Finance
2 Maths / Math / Mathematics
3 business
4 17 / seventeen
5 holiday(s) / vacation(s)
6 college
7 location
8 jeans
9 late
10 smile

Section 2, Questions 11–20

11 A
12 B
13 A
14 C
15 A
16 B
17 B
18 D
19 A
20 E

Section 3, Questions 21–30

21 A
22 A
23 C
24 C
25 B
26 A
27&28 *IN EITHER ORDER*
B
C
29&30 *IN EITHER ORDER*
D
E

Section 4, Questions 31–40

31 destruction
32 universities / university
33 political
34 port(s)
35 slaves / slavery
36 taxation
37 sugar
38 tea
39 transportation
40 night

If you score ...

0–17	18–26	27–40
you are unlikely to get an acceptable score under examination conditions and we recommend that you spend a lot of time improving your English before you take IELTS.	you may get an acceptable score under examination conditions but we recommend that you think about having more practice or lessons before you take IELTS.	you are likely to get an acceptable score under examination conditions but remember that different institutions will find different scores acceptable.

TEST 4

READING

Reading Passage 1, Questions 1–13

1 FALSE
2 FALSE
3 TRUE
4 TRUE
5 FALSE
6 TRUE
7 NOT GIVEN
8 TRUE
9 wool
10 navigator
11 gale
12 training
13 fire

Reading Passage 2, Questions 14–26

14 minerals
15 carbon
16 water
17 agriculture
18 C
19 E
20 A
21 D
22 E
23 C
24 F
25 G
26 F

Reading Passage 3, Questions 27–40

27 D
28 A
29 B
30 F
31 B
32 G
33 E
34 A
35 YES
36 NOT GIVEN
37 NO
38 NOT GIVEN
39 YES
40 NO

If you score ...

0–16	17–25	26–40
you are unlikely to get an acceptable score under examination conditions and we recommend that you spend a lot of time improving your English before you take IELTS.	you may get an acceptable score under examination conditions but we recommend that you think about having more practice or lessons before you take IELTS.	you are likely to get an acceptable score under examination conditions but remember that different institutions will find different scores acceptable.

Sample answers for Writing tasks

TEST 1, WRITING TASK 1

SAMPLE ANSWER

This is an answer written by a candidate who achieved a **Band 5.5** score. Here is the examiner's comment:

> The candidate has identified all the key features (hospital, ring road, new public car park, staff car park and bus station in 2010) but the descriptions are not always accurate e.g. [*two features that still remained. This two features are City Hospital and staff car park*] whereas the staff car park was formerly a car park for both staff and public, while the mention of the bus station is not developed. Organisation is clear, however, with some good use of cohesive devices [*According to* | *Apart from* | *The further additional features*], although there is an error in the use of reference pronouns [*This/These two features*]. The range of vocabulary is sufficient for the task [*two different years* | *features* | *remained* | *additional*], though [*features*] is over-used. A spelling error is noted in the second line [*sourrounded*] but this does not cause any difficulty for the reader; similarly, the use of [*around-turn*] can be easily understood as 'roundabout'. There is a mix of simple and complex sentences, mainly used accurately.

Two maps illustrate the way to get to a city hospital of two different years (2007 and 2010).

According to both maps, the main features which is city hospital is sourrounded by Ring Road. In these two maps, there have been two features that still remained. This two features are City Hospital and staff car park. Apart from these two features there are some features that shows on 2010 map but haven't shown on 2007 map. The additional features that appear on the map of 2010 are public car park which located on the east-side of the city hospital. The further additional features are two around-turn on the hospital Rd. which can lead to the bus station.

Overall, there are two major features that never change on both 2007 and 2010 map. These features are city hospital and staff car park. However, there are some additional features that appear on the map of 2010 but not on 2007. These features are public car park, bus station and two around-turns.

TEST 1, WRITING TASK 2

SAMPLE ANSWER

This is an answer written by a candidate who achieved a **Band 6.5** score. Here is the examiner's comment:

> The candidate deals with both parts of the prompt and addresses some social and practical problems that might be experienced in a foreign language environment. Ideas are supported by examples, though there is room for further development here. Organisation is logical and there is clear progression throughout the response. Cohesive devices are used appropriately [*Another problem* | *For example* | *Therefore* | *That means …* | *The second … problem* | *To summarize*]. There is a sufficient range of vocabulary to allow some flexibility and precision and to demonstrate awareness of style and collocation [*language barrier* | *linked to* | *influence the behaviour* | *offend* | *misunderstanding* | *misconceptions*]. There is a mix of simple and complex sentence forms including subordinate clauses [*which means that* | *a person who*], modal verbs [*should* | *might* | *would*] and gerunds [*finding a job*]. Grammatical control is generally good as is the use of punctuation, although the first sentence in the second paragraph is incomplete.

It is clear that living in a foreign country has its own benefits and drawbacks to consider. I agre with this statement, however I think that anybody coming in another country should respect national culture. In this essay, I would like to outline the social and practical problems.

The social problems would be language barrier, which means that a person coming from another country might not be able to speak and understand the language which might be a problem as far a person who is living in a country, and a person who came in the country. Another problem is linked to the language barrier, but it might influence the behaviour of others. An individual who come into the country might offend others with their behaviour or language. For example; some cultures like English people prefer to be very polite and say things differently from other cultures. Therefore a person who doesn't know how to behave in a particular culture might offend others around him.

The practical problems would be misunderstanding of culture. That means that a person who visits other countries does not understand other culture and he behaves as he wants to.

The second practical problem is finding a job. An individual who works in foreign country might not be appropriate for people who he serves. For example if an individual works in a restaurant, the people who live in a country and they were born in that country might not respect and not like the behaviour of a person who works in a restaurant, it might be because, the cultures are different.

To summarize, it can be said that there are a lot of misconceptions which people have when they come in a foreign country, and in my opinion and from my personal experience people should educate themselves in order to know how to behave in different situations with different cultures.

TEST 2, WRITING TASK 1

SAMPLE ANSWER

This is an answer written by a candidate who achieved a **Band 6.0** score. Here is the examiner's comment:

> The candidate has identified all the main features and trends, including the fact that in 1971 the number of households in owned and rented households was the same. Comments are supported by dates and percentages of households and there is a short overview at the end of the script. Organisation is clear as the writer deals with each category in turn. The range of vocabulary is adequate but there are frequent spelling errors [*comprssion* / comparison | *dramaticly droped* / dramatically dropped | *stated* / stayed | *yeas* / year | *leveled* / levelled | *Genarally* / Generally | *prectarge* / percentage]. These do not noticeably impede communication, however. There is a mix of grammatical structures and some complex sentence forms, though these are not always accurate: the meaning is still clear, however.

The provided bar chart depicts the comprssion of buying or renting houses in England and Wales from 1918 to 2011.

1918 the rented households was raised about 78 percentage. Then it leveled of between 1939 to 1953. From 1961 to 1981 it dramaticly droped to 35 percentage. This accommodation stated the same until 2001. In 2011 there was a slight increase in rented households and it was up to 38%.

The same yeas the owned ones has raise from 21% to 32% in 1918 to1953. In 1939 to 1953 the was a graduate stade in the percentage. Then it starts to leveled up to 69% In 1991. At 2001 to 2011 there was a decline in the owned accommodation and it was 62%.

Genarally , both of the rented and owned households has raised and droped throug the years from 1918 to 2011. The was a year that the were the same prectarge and it was 1971 which 50%

TEST 2, WRITING TASK 2

SAMPLE ANSWER

This is an answer written by a candidate who achieved a **Band 7.0** score. Here is the examiner's comment:

> The candidate explains why s/he both agrees and disagrees with the statement, meeting the requirements of 'To what extent do you agree or disagree with this statement?' S/he singles out two areas of disagreement (food and jobs) and provides clear examples to support these opinions, then goes on to identify an area of agreement (TV channels), again providing support and then some development of the example. Organisation is logical and there is clear progression throughout the writing. There is a range of cohesive devices, used appropriately [*Take for example* | *Actually* | *Therefore* | *Naturally* | *However* | *This specific area* | *From this point of view* | *In conclusion*]. The range of vocabulary is sufficient to show some flexibility and precision, as well as less common items and an awareness of style and collocation [*Complex* | *list of favourites* | *fits … my abilities* | *specific area* | *many available channels*]. There is only one spelling error [*beome*], probably a slip of the pen. Control over grammar and punctuation is generally good and there is a variety of complex structures with frequent error-free sentences.

The answer is complex since there are a lot of choices in our life and all of them are different kinds. In some cases I would say that it is a good thing to have the ability to choose from a wide variety. Take for example gastronomy. Every single person has different meals on their list of favourites. Actually if you have a bigger family it is almost impossible to cook something that everyone would like. Therefore I would say that it is great that you can go to a shopping center and choose from a dozen different food types. I can always find something that looks delicious.

Naturally, there are some people who say that it is against evolution. They claim to say that back in the old days we had a perfect life when technically everybody was farming. I personally disagree with that. I am happy that I could choose a job that fits best to my abilities. I mean no one is the same, why would we want to do the same? Different kinds of universities give us the opportunity to beome who we are meant to be. We have the right to choose.

However there is one topic where, according to my opinion, we have too many choices. This specific area is television. There are hundreds of channels, therefore you can always find something that is worth watching. Literally you could sit in your sofa the whole day and watch films. I think that people doing less outdoor activities are the results of the many available channels. From this point of view I would agree that we have too many choices.

In conclusion I would say that we can't generally talk about choices since they could be different. In some cases it is good to have many of them while in other areas they could have a negative effect.

TEST 3, WRITING TASK 1

SAMPLE ANSWER

This is an answer written by a candidate who achieved a **Band 5.0** score. Here is the examiner's comment:

> This response is rather mechanical as it lists the countries in order of production and consumption of electricity, identifies the countries that produce and consume most and least and notes the fact that all the countries except Germany produce more than they consume. However, the writing is supported by data, although there are some errors in the figures (the figures for production in Russia, India and Brazil are inaccurate as is the figure for consumption in Japan). Organisation is limited and there are few examples of cohesive devices; similarly the range of vocabulary is limited although just adequate for the task. There is a mix of simple and complex sentence structures, but complex forms are mainly inaccurate [*that have* / has | *Almost all the country have* / Almost all the countries have].

From the bar chart that show the top ten countries for the production and consumption of electricity in 2014. For the production of electricity, the 1st rank is China that have 5,398 billion kwh, the 2nd rank is United States that have 4,099 billion kwh, the 3rd rank is Russia that have 1,059 billion kwh, the 4th rank is Japan that have 936.2 billion kwh, the 5th rank is India that have 891 billion kwh, the 6th rank is Canada that have 618.9 billion kwh, the 7th rank is France that have 561.2 billion kwh, the 8th rank is Brazil that have 530.9 billion kwh, the 9th rank is Germany that have 526.6 billion kwh and the 10th rank is Republic of Korea that have 485.1 billion kwh. For the comsumption of electricity, the 1st rank is China that have 5,322 billion kwh, the 2nd rank is United States that have 3,866 billion kwh, the 3rd is Russia that have 1,038 billion kwh, the 4th rank is Japan that have 856.9 billion kwh, the 5th rank is India that have 698.8 billion kwh, the 6th rank is Germany that have 582.5 billion kwh, the 7th rank is Canada that have 499.9 kwh, the 8th rank is France that have 462.9 billion kwh, the 9th rank is Brazil that have 455.8 kwh and the 10th is Republic of Korea that have 449.5 billion kwh.

From the information. The country that have the most in production and consumption is China. The country that have the least in production and consumption is Republic of Korea.

Almost all the country have production more than consumption, exept Germany that have consumption more than production.

TEST 3, WRITING TASK 2

SAMPLE ANSWER

This is an answer written by a candidate who achieved a **Band 6.0** score. Here is the examiner's comment:

> The writer addresses all parts of the prompt and outlines why the various subjects are all important, supporting these ideas with relevant examples. Although the organisation is sometimes confused, there is a sense of progression and a definite conclusion is reached. Cohesive devices are used effectively [*In my opinion* | *Of course* | *especially*]. Referencing is generally accurate [*we wouldn't know that without them* | *these things* | *that hope* | *that is a reason why*], but there is one error [*With this / these two things*]. The range of vocabulary is quite varied [*go along with today's world* | *to move forward* | *daily life* | *transportation, communication, collaboration etc.* | *political standing, culture and traditions*], though errors occur [*every subjects /* subject | *normally /* normal *human beings* | *a bright chances /* chance], while a reference to [*stuff and things*] suggests the writer struggled to find more precise terms. There is a mix of simple and complex sentence forms, including different types of subordinate clauses [*Some people say that …* | *… which is science and technology* | *… people who pushes /* push *us to* | *The / They taught us how to*] and although errors occur, these do not usually cause misunderstanding or difficulty for the reader. Punctuation is sometimes faulty, particularly omission of full stops.

In my opinion I think every subjects is important for us. We have to learn everything through our past, present and future. Some people say that History is one of the most important school subjects it's true but it has to go along with today's world which is science and Technology. How can we move without our history, the people behind us "The ancient people" is the most powerful people who pushes us to move forward. The taught us how to fire a light, How to find a food, How to lives with other and animals, How to survive and others. Of course we wouldn't know that without them. Science and Technology are important too. They give us a chance to move forward with them. Without Science and Technology we're just a normally humans being. We spend our daily life with no useful. Without them we have no light we have no food, we have no comfortable stuff and things. Old people can survived without these things. Humans creates lots of invention to give an unlimited wants of people based on a limited government.

May I gives one example of the development of science and Technology. With this two things it give us a chance to be a member of ASEAN "Association of South East Asia Nation" we can be able to communicate with the other 9 countries with the high technology. it help us to be a TEAMWORK with the 9 other countries to develop our country. help us in terms of transportation, communication, collaboration etc. it can definitely hold on to that hope that in the near future.

Overall economics can totally achieves. it is a fact that the member of the member of the ASEAN have differences in term of political standing, culture and traditions but it's not a problem with our help I know that there're a bright future are waiting for all of us. and that is a reason why History, Science and Technology is important

We use History to learn about others, their culture, their tradition to be understand each other more and more and using science and Technology to help us, our country, our world to be moving forward, to help each other and to give a bright chances and future for everyone, especially kids give a chances to them to study, to go to school, to get knowledge so the next ten years, twenty years to the new up coming year all of them can help each other to pass these chances to other kids go on and on.

TEST 4, WRITING TASK 1

SAMPLE ANSWER

This is an answer written by a candidate who achieved a **Band 6.5** score. Here is the examiner's comment:

> This answer addresses the main features of the redeveloped sports centre, but it could be improved by adding a brief description of the centre as it is at present. Another aspect of the response that could be improved would be to indicate where the various facilities will be situated in relation to each other: from the description above the reader cannot know where for example the gym, the leisure pool and the dance studios will be located. The range of vocabulary is above average, however: [*illustrate* | *reconstruction* | *redeveloped* | *additional* | *replaced by other facilities* | *renovated*] and shows flexibility and precision. There is a variety of complex structures such as present and future verb forms, passive forms and relative clauses [*the place where…* | *It is also clear… that*]. There could be more variety in the language used to express future plans: [*going to*] is over-used.

The following plans illustrate the layout of the university's sports centre at the present moment and the way it will look after a reconstruction.

According to the new layout, the redeveloped sports centre is going to become bigger. First, the gym is going to be larger and an additional changing room is going to appear. Besides, there is going to be a sports shop and a cafe in the reception zone. Apart from that, 2 dance studios are going to work opposite the gym. Finally, the sports centre is going to get a new leisure pool. It is going to be located in the place where the outdoor courts used to be. As can be seen from the new layout, both outdoor courts are going to be replaced by other facilities in the renovated sports centre. Furthermore, a sports hall is going to appear in the university sports centre. It is also clear from the second layout that the redeveloped sports centre is going to be a fully indoor one.

TEST 4, WRITING TASK 2

SAMPLE ANSWER

This is an answer written by a candidate who achieved a **Band 6.0** score. Here is the examiner's comment:

> This script presents some difficulties for the reader. There is an attempt to answer the first part of the prompt (Why is this the case?) although the explanation is not well supported, while the answer to the second question (What can be done about this problem?) lacks focus as it mentions education, clean water and social mobility as well as food. At the same time, it is clear that the writer has some ideas, but lacks the language needed to express them satisfactorily. Ideas are organised into paragraphs and there is some sense of progression, with accurate use of cohesive devices [*Nowadays* | *According to* | *for example*] although there is also some inaccuracy [*Hence* | *In the long team / term?*]. Control over spelling and word formation is weak and there are frequent errors [*itmes* | *opioin* | *Captialism* | *divied* | *countris* | *resouse* | *develping*] for example, causing further difficulty. There are attempts to produce both simple and complex sentence forms, but the error level is high throughout, even in simple forms [*I think it made many problem* | *the people will be expenditure more*]. Punctuation is also sometimes faulty.

Nowadays, many countries has been tried to develop the Advances itmes to Solves the lack of food in the world by the way why many people around the world still go hungry, In my opioin, I think "Captialism".

Under "the world Order" by USA in 1970 (the cold war) divied the countris around the world in to 3 groups, 1) the frist world like USA, UK, Japan like that, 2) the second word was like Soviet Union and 3) the third word was a devopling countries. I didn't think the captialism is bad, I think it made many problem such as the lack of food in the poor countries.

According to the Economics, the develped countries have a absolute rights to take an adventage from the resouse in the develping countries with the lowest wage, the hardest working and the dangerous places working Hence, the people who live in the devepling countries has no oppunities to moblisation their status. the lowest wage they get vice versa the high price of their item product for example 1 dollar US per a day for 1 worker in the develped countries, but 100 dollar US per the item product to be selled, the cap is approximate 99 dollar US goes to the owner who live in the deveoped countries.

The solve of this problem, I think the goverment on each countries should guranted their citizen to have a basic rights, Food, Clear water and Education, for example. The highest price of food that restrize the poor people to access the food, the government need to bare the barrier pices of food won't be high

In the long team of solving this problem, the govement will give more Education fee as free for thie civilan becaus I absolutely think Education comes with mobilisatim the social status when the people has a high Education comes with a hire in a high working. then the government should bare the free of houshold is not high as well. the people will be expenditure more. When the more expenditure the people have, the more money they have we have to solve this problem together, Not the duty of some countries, the problem will be eradicated from the wild. fainally we have to have a hope to solve it, Not despair yet.

BRITISH COUNCIL

idp IELTS AUSTRALIA

CAMBRIDGE ENGLISH Language Assessment
Part of the University of Cambridge

IELTS Listening and Reading Answer Sheet

Centre number:

Pencil must be used to complete this sheet.

Please write your **full name** in CAPITAL letters on the line below:

SAMPLE

Then write your six digit Candidate number in the boxes and shade the number in the grid on the right.

0 1 2 3 4 5 6 7 8 9
0 1 2 3 4 5 6 7 8 9
0 1 2 3 4 5 6 7 8 9
0 1 2 3 4 5 6 7 8 9
0 1 2 3 4 5 6 7 8 9
0 1 2 3 4 5 6 7 8 9

Test date (shade ONE box for the day, ONE box for the month and ONE box for the year):

Day: 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Month: 01 02 03 04 05 06 07 08 09 10 11 12

Year (last 2 digits): 13 14 15 16 17 18 19 20 21

Listening	Listening	Listening	Listening	Listening	Listening
1		✓ 1 ✗	21		✓ 21 ✗
2		✓ 2 ✗	22		✓ 22 ✗
3		✓ 3 ✗	23		✓ 23 ✗
4		✓ 4 ✗	24		✓ 24 ✗
5		✓ 5 ✗	25		✓ 25 ✗
6		✓ 6 ✗	26		✓ 26 ✗
7		✓ 7 ✗	27		✓ 27 ✗
8		✓ 8 ✗	28		✓ 28 ✗
9		✓ 9 ✗	29		✓ 29 ✗
10		✓ 10 ✗	30		✓ 30 ✗
11		✓ 11 ✗	31		✓ 31 ✗
12		✓ 12 ✗	32		✓ 32 ✗
13		✓ 13 ✗	33		✓ 33 ✗
14		✓ 14 ✗	34		✓ 34 ✗
15		✓ 15 ✗	35		✓ 35 ✗
16		✓ 16 ✗	36		✓ 36 ✗
17		✓ 17 ✗	37		✓ 37 ✗
18		✓ 18 ✗	38		✓ 38 ✗
19		✓ 19 ✗	39		✓ 39 ✗
20		✓ 20 ✗	40		✓ 40 ✗

Marker 2 Signature

Marker 1 Signature

Listening Total

IELTS L-R v1.0

denote 0121 520 5100

DP787/394

Please write your **full name** in CAPITAL letters on the line below:

SAMPLE

Please write your Candidate number on the line below.

Please write your three digit language code in the boxes and shade the numbers in the grid on the right.



Are you: Female? ☐ Male? ☐

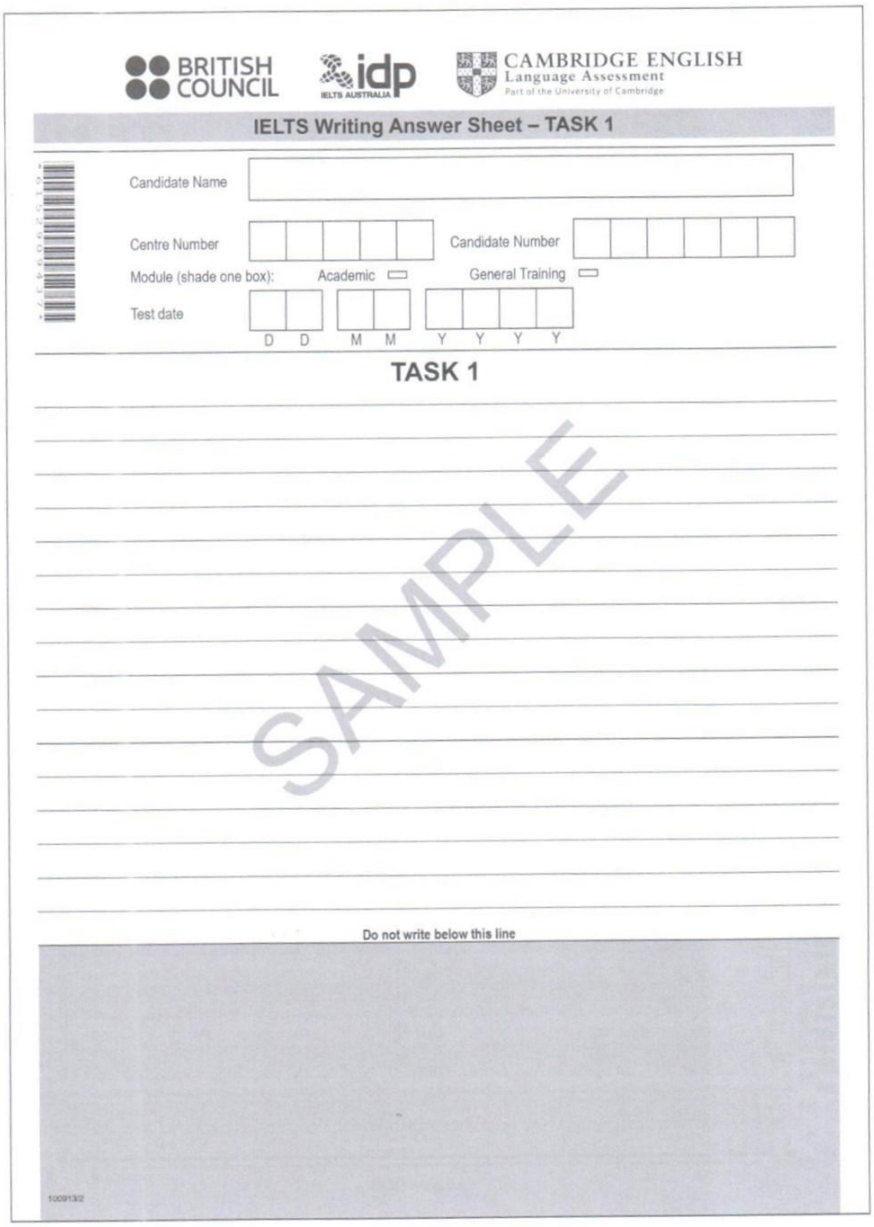
Reading Reading Reading Reading Reading Reading

Module taken (shade one box): Academic ☐ General Training ☐

		Marker use only			Marker use only
1		✓ 1 ✗	21		✓ 21 ✗
2		✓ 2 ✗	22		✓ 22 ✗
3		✓ 3 ✗	23		✓ 23 ✗
4		✓ 4 ✗	24		✓ 24 ✗
5		✓ 5 ✗	25		✓ 25 ✗
6		✓ 6 ✗	26		✓ 26 ✗
7		✓ 7 ✗	27		✓ 27 ✗
8		✓ 8 ✗	28		✓ 28 ✗
9		✓ 9 ✗	29		✓ 29 ✗
10		✓ 10 ✗	30		✓ 30 ✗
11		✓ 11 ✗	31		✓ 31 ✗
12		✓ 12 ✗	32		✓ 32 ✗
13		✓ 13 ✗	33		✓ 33 ✗
14		✓ 14 ✗	34		✓ 34 ✗
15		✓ 15 ✗	35		✓ 35 ✗
16		✓ 16 ✗	36		✓ 36 ✗
17		✓ 17 ✗	37		✓ 37 ✗
18		✓ 18 ✗	38		✓ 38 ✗
19		✓ 19 ✗	39		✓ 39 ✗
20		✓ 20 ✗	40		✓ 40 ✗

Marker 2 Signature | Marker 1 Signature | Reading Total

© UCLES 2018 Photocopiable



BRITISH COUNCIL

idp IELTS AUSTRALIA

CAMBRIDGE ENGLISH Language Assessment
Part of the University of Cambridge

IELTS Writing Answer Sheet – TASK 1

Candidate Name

Centre Number | Candidate Number

Module (shade one box): Academic ☐ General Training ☐

Test date

D D M M Y Y Y Y

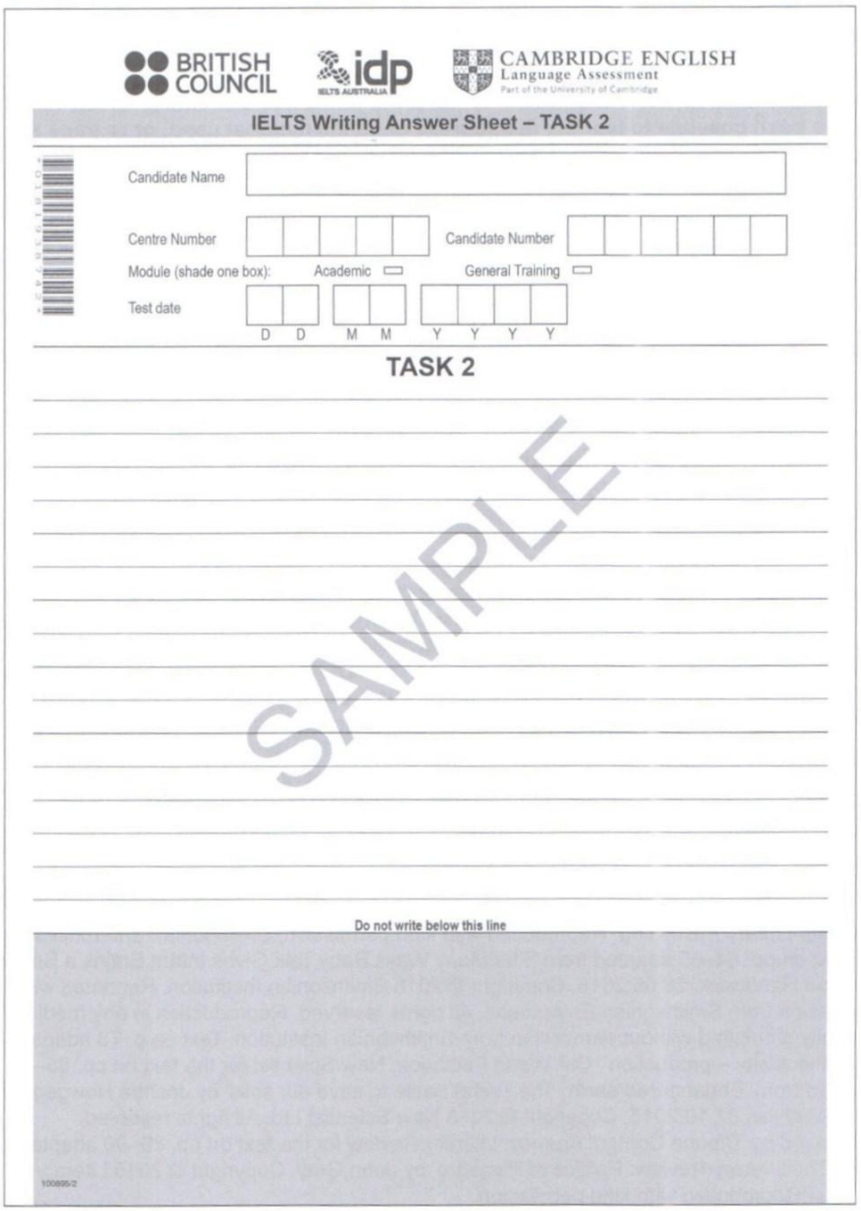
TASK 1

SAMPLE

Do not write below this line

1009132

© UCLES 2018 Photocopiable



BRITISH COUNCIL idp IELTS AUSTRALIA CAMBRIDGE ENGLISH Language Assessment Part of the University of Cambridge

IELTS Writing Answer Sheet – TASK 2

Candidate Name

Centre Number Candidate Number

Module (shade one box): Academic General Training

Test date D D M M Y Y Y Y

TASK 2

SAMPLE

Do not write below this line

100695/2

© UCLES 2018 Photocopiable

Acknowledgements

The publishers acknowledge the following sources of copyright material and are grateful for the permissions granted. While every effort has been made, it has not always been possible to identify the sources of all the material used, or to trace all copyright holders. If any omissions are brought to our notice, we will be happy to include the appropriate acknowledgements on reprinting and in the next update to the digital edition, as applicable.

Conde Nast for the text on p. 15 adapted from 'How City Living Is Reshaping the Brains and Behaviour of Urban Animals' by Brandon Keim, *Wired Magazine* 2013. Copyright © 2013 Conde Nast. Reproduced with permission; Taylor & Francis Group for the text on pp. 16–17 adapted from 'Marketing in Travel and Tourism' by Victor Middleton, Alan Fyall, Mike Morgan and Ashok Ranchhod. Copyright © 2009 Taylor & Francis Group. Reproduced with permission; New Scientist for the text on pp. 21–22 adapted from 'Why being bored is stimulating - and useful, too' by Caroline Williams, *New Scientist*, 29.08.2015. Copyright © 2015 New Scientist Ltd. All rights reserved. Distributed by Tribune Content Agency; New Scientist for the text on pp. 24-25 adapted from 'Creative Sparks' by Catherine de Lange, *New Scientist*, 14.01.2012. Copyright © 2012 New Scientist Ltd. All rights reserved. Distributed by Tribune Content Agency; UCSF Memory and Aging Center for the text on p. 37 adapted from 'Memory'. Copyright © The Regents of the University of California. Reproduced with kind permission; University of Minnesota Libraries for the text on pp. 38–39 adapted from 'A Taste of Paradise: Cinnamon' by Troy David Osborne. Copyright © James Ford Bell Library, University of Minnesota, https://www.lib.umn.edu/bell/tradeproducts/cinnamon. Reproduced with kind permission; New Scientist for the text on pp. 42–43 adapted from 'Dark side of the love hormone' by Ed Yong, *New Scientist*, 08.02.2012. Copyright © 2012 New Scientist Ltd. All rights reserved. Distributed by Tribune Content Agency; Harvard Business Publishing for the text on pp. 46–47 adapted from 'Are You Ignoring Trends That Could Shake Up Your Business?' by Elie Ofek and Luc Wathieu, issue July–August 2010. Copyright © 2010 by Harvard Business Publishing. Reproduced with permission; Department for Communities and Local Government (DCLG) and Census for the text on p. 51 adapted from 'A Century of Home Ownership and Renting in England and Wales', Office for National Statistics licensed under the Open Government Licence v.3.0; Bodleian Library Publishing for the text on pp. 60–61 adapted from 'What have plants ever done for us?' by Stephen Harris. Copyright © 2015 Bodleian Library Publishing. Reproduced with kind permission; Smithsonian Enterprises for the text on pp. 64–65 adapted from 'The Many Ways Baby Talk Gives Infant Brains a Boost' by Brian Handwerk, 28.05.2015. Copyright © 2015 Smithsonian Institution. Reprinted with permission from Smithsonian Enterprises. All rights reserved. Reproduction in any medium is strictly prohibited without permission from Smithsonian Institution; Text on p. 73 adapted from 'Electricity – production', CIA World Factbook; New Scientist for the text on pp. 85–86 adapted from 'Endangered earth: The secret battle to save our soils' by Joshua Howgego, *New Scientist*, 07.10.2015. Copyright © 2015 New Scientist Ltd. All rights reserved. Distributed by Tribune Content Agency; Literary Review for the text on pp. 89–90 adapted from 'The Literary Review: Politics of Pleasure' by John Gray. Copyright © 2015 Literary Review. Reproduced with kind permission.

URLS

The publisher has used its best endeavours to ensure that the URLs for external websites referred to in this book are correct and active at the time of going to press. However, the publisher has no responsibility for the websites and can make no guarantee that a site will remain live or that the content is or will remain appropriate.

IELTS 13
ACADEMIC
WITH ANSWERS

This 13th collection of examination papers for IELTS provides all the exam practice you need.
It contains:

- four complete tests for Academic candidates
- a useful introduction to the exam together with an explanation of the scoring system
- answer keys and recording scripts
- photocopiable answer sheets so you can practise transferring your answers.
- audio recorded material for the Listening paper as a download.

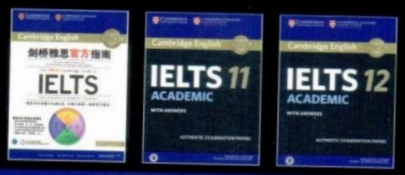
CAMBRIDGE ENGLISH CORPUS

The **Cambridge English Corpus** is a multi-billion word collection of written and spoken English. It includes the **Cambridge Learner Corpus**, a unique bank of exam candidate papers.

Our authors study the Corpus to see how English is really used, and to identify typical learner mistakes. This means that Cambridge materials help students to avoid mistakes, and you can be confident the language taught is useful, natural and fully up to date.

www.cambridge.org/corpus

CAMBRIDGE QUALITY GUARANTEE





IELTS13zu915

ISBN 978-1-108-61941-7