



# KHÓA HỌC IELTS READING ONLINE

VIDEO B

B

[ielts-nguyenhuyen.com](http://ielts-nguyenhuyen.com)

---

## Contents

<b>V02 – CÁCH TÌM TỪ KHÓA .....</b>	<b>5</b>
<b>V03 – CÁCH ĐOÁN NGHĨA TỪ MỚI.....</b>	<b>6</b>
<b>V05 - SHORT ANSWER QUESTIONS.....</b>	<b>9</b>
<b>V06 - SENTENCE COMPLETION.....</b>	<b>14</b>
<b>V07 - SUMMARY COMPLETION .....</b>	<b>21</b>
<b>V08 - TABLE/ FLOW CHART COMPLETION .....</b>	<b>27</b>
<b>V09 - PLAN/MAP COMPLETION.....</b>	<b>32</b>
<b>V10 - TRUE/ FALSE/ NOT GIVEN – YES/ NO/ NOT GIVEN .....</b>	<b>38</b>
<b>V11 - MATCHING FEATURES.....</b>	<b>48</b>
<b>V12 - MATCHING SENTENCE ENDINGS .....</b>	<b>54</b>
<b>V13 - MATCHING HEADINGS .....</b>	<b>60</b>
<b>V14 - WHICH PARAGRAPH CONTAINS? .....</b>	<b>72</b>
<b>V15 - MULTIPLE CHOICE .....</b>	<b>79</b>

## **BỘ TÀI LIỆU KHÓA IELTS READING ONLINE**

**Chào mừng bạn đến với khóa học IELTS Reading Online của Huyền. Cảm ơn các bạn đã tin tưởng Huyền và lựa chọn đăng ký khóa học.**

Để đạt được sự hiệu quả tối đa từ khóa học, sau đây là một số điều bạn cần lưu ý.

- Trong mỗi video bài giảng Huyền đều rút ra bảng từ đồng nghĩa và từ vựng cần học, do vậy, bạn nên chuẩn bị 1 quyển vở để ghi lại những phần này.
- Tài liệu của khóa học gồm 2 giáo trình chính: Sách VIDEO A và SÁCH VIDEO B. Các bạn cần đi in 2 quyển này nhé.

Video A: quyển lý thuyết chỉ cách làm các dạng. Mỗi lần mở video có chứa chữ cái “a” bạn hãy mở quyển sách này để theo dõi.

Video B: đây là quyển bài tập, trong đây các bài tập đều được chia ra làm từng dạng rất dễ dàng cho việc làm bài. Sau khi xem xong video “a”, các bạn sẽ làm bài tập trong quyển này **TRƯỚC KHI** xem các video có chữ cái “b” nhé.

- Khóa học gồm 28 video bài giảng. Huyền đã sắp xếp video theo thứ tự logic (video trước có liên quan đến video sau) → do đó bạn cần xem video theo đúng thứ tự Huyền đã sắp xếp để có được hiệu quả cao nhất nhé.
- Huyền đầu tư rất nhiều công sức vào khóa học này, các bạn có thể thấy được điều đó qua việc Huyền giải chi tiết từng bài tập, bài nào Huyền cũng rút ra bảng từ đồng nghĩa, từ/ cụm từ cần học (dịch sẵn tiếng Việt, Anh và kèm ví dụ), chứ không chỉ đơn thuần đưa đáp án cho các bạn dò.
- Sau khi học xong khóa học, bạn sẽ nắm được chiến lược làm từng dạng bài, và chiến thuật làm bài khi không dịch được đoạn văn (chiến lược này dùng khi trong đề thi thật, mình không thể dịch được đoạn chứa đáp án). Ngoài ra, các bạn có được nguồn từ vựng, từ đồng nghĩa quan trọng – trang bị cho kỳ thi thật.
- Các bài tập trong khóa học có nguồn gốc từ các sách IELTS của nhà xuất bản Cambridge và trên website của cựu giám khảo IELTS Simon.

- Và điều cuối cùng là: Huyền đã dành rất nhiều tâm huyết, công sức và thời gian để cho ra khóa học này. Do đó Huyền rất mong các bạn **KHÔNG CHIA SẺ HAY PUBLIC VIDEO** để Huyền có thể dành thời gian vào việc thiết kế các khóa học cho những kỹ năng khác.

Xin chân thành cảm ơn và chúc các bạn học thật tốt.

Thân ái

Nguyễn Huyền

## V02 – CÁCH TÌM TỪ KHÓA

1. Many seed banks are themselves under threat due to a lack of funds.
2. The charity raises money to pay for education and the daily needs of poor people.
3. Persuading people to use trains and buses will always be an uphill struggle.
4. The amount of open space in California has diminished over the last ten years.
5. The farmers of a tribe grow a wide range of plants.
6. Who is the person that first used the word 'serendipity'?
7. What did eggs represent on the whole?
8. Who was the first non-Italian architect influenced by Palladio?
9. Who arranged Palladio's architectural studies?
10. Michael Eisenberg believes in giving children financial incentives to do certain tasks.

### V03 – CÁCH ĐOÁN NGHĨA TỪ MỚI

Hãy vận dụng những phương pháp đoán nghĩa từ mới để đoán nghĩa những từ **được in đậm gạch chân** trong các câu dưới đây.

1. **Metaphor**, a kind of symbol, is an important analytical concept.

.....

2. **The deluge**, a flood of rain, threatened to drown the little town.

.....

3. They buy **real estate** such as houses, office buildings, and land.

.....

4. They bought **luxury items** – e.g., Rolls Royces and Rolex watches.

.....

5. Black is the colour of **mourning**; at a funeral people wear black clothing.

.....

6. Her tea was **tepid**, so she put it in the microwave.

.....

7. **Sleet** (half rain and half snow) can be very difficult to drive in due to poor visibility.

.....

8. **The podiatrist** told the woman to take the medicine for 5 days and call him if she did not feel better.
- .....

9. A **tornado** (a violent storm of twisting wind) struck Edmonton and caused a lot of damage.
- .....

10. **Giggling** involves laughing in a silly way.
- .....

11. People have gotten lost 10 metres from their homes in **blizzard** – snowfalls that come down very quickly.
- .....

12. Another dangerous form of weather is **hail** (falling balls of ice) which has been known to get so big that it can break a car windshield.
- .....

13. **Breaking even** involves making money to pay for business costs but no more.
- .....

14. Many new businesses **go bankrupt**, which means they lost everything.

.....

15. The Big Three are designing **radical** new cars including vehicles that use radar and advanced computers.

.....



## V05 - SHORT ANSWER QUESTIONS

NO MORE THAN THREE WORDS	
<b>1</b>	<p>In addition to the reptiles, birds, mammals and insects which we see all around us, other groups that have succeeded out of water include scorpions, snails, crustaceans such as woodlice and land crabs, millipedes and centipedes, spiders and various worms. And we mustn't forget the plants, without whose prior invasion of the land none of the other migrations could have happened.</p> <p><b>What had to transfer from sea to land before any animals could migrate?</b>          .....</p>
<b>2</b>	<p>Moving from water to land involved a major redesign of every aspect of life, including breathing and reproduction.</p> <p><b>Which TWO processes are mentioned as those in which animals had to make big changes as they moved onto land?</b> .....</p>
<b>3</b>	<p>Whales (including the small whales we call dolphins) and dugongs, with their close cousins the manatees, ceased to be land creatures altogether and reverted to the full marine habits of their remote ancestors. They don't even come ashore to breed. They do, however, still breathe air, having never developed anything equivalent to the gills of their earlier marine incarnation.</p> <p><b>Which physical feature, possessed by their ancestors, do whales lack?</b>          .....</p>
<b>4</b>	<p>Ichthyosaurs were reptilian contemporaries of the dinosaurs, with fins and streamlined bodies. The fossils look like dolphins and they surely lived like dolphins, in the water.</p> <p><b>Which animals might ichthyosaurs have resembled?</b> .....</p>

<b>NO MORE THAN TWO WORDS AND/OR A NUMBER</b>	
<b>5</b>	<p>The New Zealand Ministry of Health has found from research carried out over two decades that 6-10% of children in that country are affected by hearing loss.</p> <p><b>For what period of time has hearing loss in schoolchildren been studied in New Zealand?</b> .....</p>
<b>6</b>	<p>Autistic spectrum disorders often result in major difficulties in comprehending verbal information and speech processing. Those experiencing these disorders often find sounds such as crowd noise and the noise generated by machinery painful and distressing.</p> <p><b>In addition to machinery noise, what other type of noise can upset children with autism?</b> .....</p>
<b>7</b>	<p>It is probable that many undiagnosed children exist in the education system with 'invisible' disabilities.</p> <p><b>What term is used to describe the hearing problems of schoolchildren which have not been diagnosed?</b> .....</p>
<b>8</b>	<p>The New Zealand Government has developed a New Zealand Disability Strategy and has embarked on a wide-ranging consultation process. The strategy recognises that people experiencing disability face significant barriers in achieving a full quality of life in areas such as attitude, education, employment and access to services. Objective 3 of the New Zealand Disability Strategy is to 'Provide the Best Education for Disabled People' by improving education so that all children, youth learners and adult learners will have equal opportunities to learn and develop within their already existing local school.</p> <p><b>What part of the New Zealand Disability Strategy aims to give schoolchildren equal opportunity?</b> .....</p>

**Example 1.****STEPWELLS**

**A.** Some wells are vast, open craters with hundreds of steps paving each sloping side, often in tiers. Others are more elaborate, with long stepped passages leading to the water via several storeys built from stone and supported by pillars, they also included pavilions that sheltered visitors from the relentless heat. But perhaps the most impressive features are the intricate decorative sculptures that embellish many stepwells, showing activities from fighting and dancing to everyday acts such as women combing their hair and churning butter.

**B.** Down the centuries, thousands of wells were constructed throughout northwestern India, but the majority have now fallen into disuse; many are derelict and dry, as groundwater has been diverted for industrial use and the wells no longer reach the water table. Their condition hasn't been helped by recent dry spells: southern Rajasthan suffered an eight-year drought between 1996 and 2004.

**C.** Today, following years of neglect, many of these monuments to medieval engineering have been saved by the Archaeological Survey of India, which has recognised the importance of preserving them as part of the country's rich history. Tourists flock to wells in far-flung corners of northwestern India to gaze in wonder at these architectural marvels from 1,000 years ago, which serve as a reminder of both the ingenuity and artistry of ancient civilisations and of the value of water to human existence.

**Questions 6–8**

Answer the questions below.

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

Write your answers in boxes **6–8** on your answer sheet.

**6** Which part of some stepwells provided shade for people?

**7** What type of serious climatic event, which took place in southern Rajasthan, is mentioned in the article?

**8** Who are frequent visitors to stepwells nowadays?

**Example 2.****WILLIAM HENRY PERKIN***The man who invented synthetic dyes*

**A.** Historically, textile dyes were made from such natural sources as plants and animal excretions. Some of these, such as the glandular mucus of snails, were difficult to obtain and outrageously expensive. Indeed, the purple colour extracted from a snail was once so costly that in society at the time only the rich could afford it. Further, natural dyes tended to be muddy in hue and fade quickly. It was against this backdrop that Perkin's discovery was made.

**B.** Perkin quickly grasped that his purple solution could be used to colour fabric, thus making it the world's first synthetic dye. Realising the importance of this breakthrough, he lost no time in patenting it. But perhaps the most fascinating of all Perkin's reactions to his find was his nearly instant recognition that the new dye had commercial possibilities .

**C.** Perkin originally named his dye Tyrian Purple, but it later became commonly known as mauve (from the French for the plant used to make the colour violet). He asked advice of Scottish dye works owner Robert Pullar, who assured him that manufacturing the dye would be well worth it if the colour remained fast (i.e. would not fade) and the cost was relatively low. So, over the fierce objections of his mentor Hofmann, he left college to give birth to the modern chemical industry.

**D.** With the help of his father and brother, Perkin set up a factory not far from London. Utilising the cheap and plentiful coal tar that was an almost unlimited by product of London's gas street lighting, the dye works began producing the world's first synthetically dyed material in 1857. The company received a commercial boost from the Empress Eugenie of France , when she decided the new colour flattered her. Very soon, mauve was the necessary shade for all the fashionable ladies in that country.

E. Not to be outdone, England's Queen Victoria also appeared in public wearing a mauve gown, thus making it all the rage in England as well. The dye was bold and fast, and the public clamoured for more. Perkin went back to the drawing board.

F. Although Perkin's fame was achieved and fortune assured by his first discovery, the chemist continued his research. Among other dyes he developed and introduced were aniline red (1859) and aniline black (1863) and, in the late 1860s, Perkin's green. It is important to note that Perkin's synthetic dye discoveries had outcomes far beyond the merely decorative. The dyes also became vital to medical research in many ways. For instance, they were used to stain previously invisible microbes and bacteria, allowing researchers to identify such bacilli as tuberculosis, cholera, and anthrax. Artificial dyes continue to play a crucial role today. And, in what would have been particularly pleasing to Perkin, their current use is in the search for a vaccine against malaria .

### Questions 8-13

*Answer the questions below.*

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

*Write your answers in boxes 8-13 on your answer sheet.*

- 8 Before Perkin's discovery, with what group in society was the colour purple associated?
- 9 What potential did Perkin immediately understand that his new dye had?
- 10 What was the name finally used to refer to the first colour Perkin invented?
- 11 What was the name of the person Perkin consulted before setting up his own dye works?
- 12 In what country did Perkin's newly invented colour first become fashionable?
- 13 According to the passage, which disease is now being targeted by researchers using synthetic dyes?

### V06 - SENTENCE COMPLETION

	Reading passage	Questions
<b>ONE WORD</b>	1. In one well-known test, women and men were able to distinguish by smell alone clothing worn by their marriage partners from similar clothing worn by other people.	Tests have shown that odours can help people recognise the..... belonging to their husbands and wives.
	2. Odours, unlike colours, for instance, cannot be named in many languages because the specific vocabulary simply doesn't exist. 'It smells like . . . , ' we have to say when describing an odour, struggling to express our olfactory experience	Certain linguistic groups may have difficulty describing smell because they lack the appropriate.....
	3. Researchers have still to decide whether smell is one sense or two - one responding to odours proper and the other registering odourless chemicals in the air .	The sense of smell may involve response to ..... which do not smell, in addition to obvious odours.
	4. Odours are invested with cultural values: smells that are considered to be offensive in some cultures may be perfectly acceptable in others.	Odours regarded as unpleasant in certain..... are not regarded as unpleasant in others.
<b>TWO WORDS</b>	5. The technique survives to this day at a test site in Florida run by the University of Florida, with support from the Electrical Power Research Institute (EPRI) , based in California. EPRI, which is funded by power companies , is looking at ways to protect the United States' power grid from lightning strikes.	EPRI receives financial support from.....
	6. However, there is still a big stumbling block. The laser is no nifty portable: it's a monster that takes up a whole room. Diels is trying to cut down the size and says that a laser around the size of a small table is in the offing.	The main difficulty associated with using the laser equipment is related to its.....
	7. The Sonar and Radar pioneers didn't know it then, but all the world now knows that bats, or rather natural selection working on bats, had perfected the system tens of millions of years earlier; and their radar' achieves feats of detection and navigation that would strike an engineer dumb with admiration.	Long before the invention of radar, ..... had resulted in a sophisticated radar-like system in bats.
	8. It is technically incorrect to talk about bat 'radar', since they do not use radio waves. It is sonar.	Radar is an inaccurate term when referring to bats because ..... are not used in

		their navigation system.
	<b>9.</b> The underlying mathematical theories of radar and sonar are very similar; and much of our scientific understanding of the details of what bats are doing has come from applying radar theory to them.	Radar and sonar are based on similar.....
	<b>10.</b> The American zoologist Donald Griffin, who was largely responsible for the discovery of sonar in bats, coined the term 'echolocation' to cover both sonar and radar, whether used by animals or by human instruments.	The word 'echolocation' was first used by someone working as a .....

**Example 1.****THE CONTEXT, MEANING AND SCOPE OF TOURISM**

Once the exclusive province of the wealthy, travel and tourism have become an institutionalised way of life for most of the population. In fact, McIntosh and Goeldner (1990) suggest that tourism has become the largest commodity in international trade for many nations and, for a significant number of other countries, it ranks second or third. For example, tourism is the major source of income in Bermuda, Greece, Italy, Spain, Switzerland and most Caribbean countries. In addition, Hawkins and Ritchie, quoting from data published by the American Express Company, suggest that the travel and tourism industry is the number one ranked employer in the Bahamas, Brazil, Canada, France, (the former) West Germany, Hong Kong, Italy, Jamaica, Japan, Singapore, the United Kingdom and the United States. However, because of problems of definition, which directly affect statistical measurement, it is not possible with any degree of certainty to provide precise, valid or reliable data about the extent of world-wide tourism participation or its economic impact. In many cases, similar difficulties arise when attempts are made to measure domestic tourism.

**Questions 11-13**

*Complete the sentences below.*

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

*Write your answers in boxes **11-13** on your answer sheet.*

**11.** In Greece, tourism is the most important .....

**12.** The travel and tourism industry in Jamaica is the major .....

**13.** The problems associated with measuring international tourism are often reflected in the measurement of .....



**Example 2.****AUTUMN LEAVES**

*Canadian writer Jay Ingram investigates the mystery of why leaves turn red in the fall*

**A.** Chlorophyll, although exquisitely evolved to capture the energy of sunlight, can sometimes be overwhelmed by it, especially in situations of drought, low temperatures, or nutrient deficiency. Moreover, the problem of oversensitivity to light is even more acute in the fall, when the leaf is busy preparing for winter by dismantling its internal machinery. The energy absorbed by the chlorophyll molecules of the unstable autumn leaf is not immediately channelled into useful products and processes, as it would be in an intact summer leaf. The weakened fall leaf then becomes vulnerable to the highly destructive effects of the oxygen created by the excited chlorophyll molecules.

**B.** Even if you had never suspected that this is what was going on when leaves turn red, there are clues out there. One is straightforward: on many trees, the leaves that are the reddest are those on the side of the tree which gets most sun. Not only that, but the red is brighter on the upper side of the leaf. It has also been recognised for decades that the best conditions for intense red colours are dry, sunny days and cool nights, conditions that nicely match those that make leaves susceptible to excess light. And finally, trees such as maples usually get much redder the more north you travel in the northern hemisphere. It's colder there, they're more stressed, their chlorophyll is more sensitive and it needs more sunblock.

**C.** What is still not fully understood, however, is why some trees resort to producing red pigments while others don't bother, and simply reveal their orange or yellow hues. Do these trees have other means at their disposal to prevent overexposure to light in autumn? Their story, though not as spectacular to the eye, will surely turn out to be as subtle and as complex.

**Questions 19-22**

*Complete the notes below.*

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

Write your answers in boxes **19-22** on your answer sheet.

**Why believe the 'light screen' hypothesis?**

- The most vividly coloured red leaves are found on the side of the tree facing the **19**.....
- The **20**..... surfaces of leaves contain the most red pigment.
- Red leaves are most abundant when daytime weather conditions are **21**..... and sunny.
- The intensity of the red colour of leaves increases as you go further **22**.....

### Example 3.

#### GIFTED CHILDREN AND LEARNING

**A.** Internationally, ‘giftedness’ is most frequently determined by a score on a general intelligence test, known as an IQ test, which is above a chosen cutoff point, usually at around the top 2-5%. Children’s educational environment contributes to the IQ score and the way intelligence is used. For example, a very close positive relationship was found when children’s IQ scores were compared with their home educational provision ( **Freeman** , 2010). The higher the children’s IQ scores, especially over IQ 130, the better the quality of their educational backup, measured in terms of reported verbal interactions with parents, number of books and activities in their home etc. Because IQ tests are decidedly influenced by what the child has learned, they are to some extent measures of current achievement based on age-norms; that is, how well the children have learned to manipulate their knowledge and know-how within the terms of the test. The vocabulary aspect, for example, is dependent on having heard those words. But IQ tests can neither identify the processes of learning and thinking nor predict creativity.

**B.** Excellence does not emerge without appropriate help. To reach an exceptionally high standard in any area very able children need the means to learn, which includes material to work with and focused challenging tuition -and the encouragement to follow their dream. There appears to be a qualitative difference in the way the intellectually highly able think, compared with more average-ability or older pupils, for whom external regulation by the teacher often compensates for lack of internal regulation . To be at their most effective in their self-regulation, all children can be helped to identify their own ways of learning – metacognition – which will include strategies of planning, monitoring, evaluation, and choice of what to learn. Emotional awareness is also part of metacognition, so children should be helped to be aware of their feelings around the area to be learned, feelings of curiosity or confidence, for example.

**C.** Yet in order to learn by themselves, the gifted do need some support from their teachers. Conversely, teachers who have a tendency to ‘overdirect’ can diminish their gifted pupils’ learning autonomy . Although ‘ spoon-feeding ’ can produce extremely high examination

results, these are not always followed by equally impressive life successes. Too much dependence on the teachers risks loss of autonomy and motivation to discover. However, when teachers o pupils to reflect on their own learning and thinking activities, they increase their pupils' self-regulation. For a young child, it may be just the simple question 'What have you learned today?' which helps them to recognise what they are doing. Given that a fundamental goal of education is to transfer the control of learning from teachers to pupils, improving pupils' learning to learn techniques should be a major outcome of the school experience, especially for the highly competent.

### Questions 23-26

Complete the sentences below. Choose **NO MORE THAN THREE WORDS** from the passage for each answer.

Write your answers in boxes **23—26** on your answer sheet

**23.** One study found a strong connection between children's IQ and the availability of .....at home.

**24.** Children of average ability seem to need more direction from teachers because they do not have .....

**25.** Meta-cognition involves children understanding their own learning strategies, as well as developing .....

**26.** Teachers who rely on what is known as .....often produce sets of impressive grades in class tests.

---

## V07 - SUMMARY COMPLETION

### Example 1.

**A.** Lewis and Brooks-Gunn (1979) suggest that infants' developing understanding that the movements they see in the mirror are contingent on their own, leads to a growing awareness that they are distinct from other people . This is because they, and only they, can change the reflection in the mirror .

**B.** This understanding that children gain of themselves as active agents continues to develop in their attempts to co-operate with others in play. Dunn (1988) points out that it is in such day-to-day relationships and interactions that the child's understanding of his- or herself emerges. Empirical investigations of the self-as-subject in young children are, however, rather scarce because of difficulties of communication : even if young infants can reflect on their experience, they certainly cannot express this aspect of the self directly.

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

Write your answers in boxes 24-25 on your answer sheet.

### How children acquire a sense of identity

First, children come to realise that they can have an effect on the world around them, for example by handling objects, or causing the image to move when they face a

**24**..... This aspect of self-awareness is difficult to research directly, because of

**25** ..... problems.

**Example 2.**

Others feel there is more of a case for the theory. Harnessing the wind would not have been a problem for accomplished sailors like the Egyptians . And they are known to have used wooden pulleys , which could have been made strong enough to bear the weight of massive blocks of stone . In addition, there is some physical evidence that the ancient Egyptians were interested in flight. A wooden artefact found on the step pyramid at Saqqara looks uncannily like a modern glider . Although it dates from several hundred years after the building of the pyramids, its sophistication suggests that the Egyptians might have been developing ideas of flight for a long time . And other ancient civilisations certainly knew about kites; as early as 1250 BC, the Chinese were using them to deliver messages and dump flaming debris on their foes .

*Complete the summary below.*

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

*Write your answers in boxes 8-13 on your answer sheet.*

**Additional evidence for theory of kite-lifting**

The Egyptians had **8** ..... which could lift large pieces of **9** ..... and they knew how to use the energy of the wind from their skill as **10** .....

The discovery on one pyramid of an object which resembled a **11**..... suggests they may have experimented with **12** .....

In addition, over two thousand years ago kites were used in China as weapons, as well as for sending **13** .....

**Example 3.****BEYOND THE BLUE HORIZON**

*Ancient voyagers who settled the far-flung islands of the Pacific Ocean*

**A.** An important archaeological discovery on the island of Efate in the Pacific archipelago of Vanuatu has revealed traces of an ancient seafaring people, the distant ancestors of today's Polynesians. The site came to light only by chance. An agricultural worker, digging in the grounds of a derelict plantation, scraped open a grave – the first of dozens in a burial ground some 3,000 years old. It is the oldest cemetery ever found in the Pacific islands, and it harbors the remains of an ancient people archaeologists call the Lapita.

**B.** They were daring blue-water adventurers who used basic canoes to rove across the ocean. But they were not just explorers. They were also pioneers who carried with them everything they would need to build new lives – their livestock, taro seedlings and stone tools. Within the span of several centuries, the Lapita stretched the boundaries of their world from the jungle-clad volcanoes of Papua New Guinea to the loneliest coral outliers of Tonga.

**C.** The Lapita left precious few clues about themselves, but Efate expands the volume of data available to researchers dramatically. The remains of 62 individuals have been uncovered so far, and archaeologists were also thrilled to find six complete Lapita pots. Other items included a Lapita burial urn with modeled birds arranged on the rim as though peering down at the human remains sealed inside. 'It's an important discovery,' says Matthew Spriggs, professor of archaeology at the Australian National University and head of the international team digging up the site, 'for it conclusively identifies the remains as Lapita.'

**Questions 27-31****Completing Summary**

*Complete the summary using the list of words and phrases, A-J, below.*

*Write the correct letter, A-J, in boxes 27-31 on your sheet.*

### The Efate burial site

A 3,000-year-old burial ground of a seafaring people called the Lapita has been found on an abandoned **27** ..... on the Pacific island of Efate. The cemetery, which is a significant **28** ....., was uncovered accidentally by an agricultural worker.

The Lapita explored and colonised many Pacific islands over several centuries. They took many things with them on their voyages including **29** ..... and tools. The burial ground increases the amount of information about the Lapita available to scientists. A team of researchers, led by Matthew Spriggs from the Australian National University, are helping with the excavation of the site. Spriggs believes the **30** ..... which was found at the site is very important since it confirms that the **31** ..... found inside are Lapita.

- |                                   |                     |                  |                  |               |
|-----------------------------------|---------------------|------------------|------------------|---------------|
| <b>A</b> proof                    | <b>B</b> plantation | <b>C</b> harbour | <b>D</b> bones   | <b>E</b> data |
| <b>F</b> archaeological discovery | <b>G</b> burial urn | <b>H</b> source  | <b>I</b> animals |               |
| <b>J</b> maps                     |                     |                  |                  |               |



**Example 4.****THE LITTLE ICE AGE**

**A.** This book will provide a detailed examination of the Little Ice Age and other climatic shifts, but, before I embark on that, let me provide a historical context. We tend to think of climate - as opposed to weather - as something unchanging, yet humanity has been at the mercy of climate change for its entire existence, with at least eight glacial episodes in the past 730,000 years. Our ancestors adapted to the universal but irregular global warming since the end of the last great Ice Age, around 10,000 years ago, with dazzling opportunism. They developed strategies for surviving harsh drought cycles, decades of heavy rainfall or unaccustomed cold; adopted agriculture and stock-raising, which revolutionised human life; and founded the world's first pre-industrial civilisations in Egypt, Mesopotamia and the Americas. But the price of sudden climate change, in famine, disease and suffering, was often high.

**B.** The Little Ice Age lasted from roughly 1300 until the middle of the nineteenth century. Only two centuries ago, Europe experienced a cycle of bitterly cold winters; mountain glaciers in the Swiss Alps were the lowest in recorded memory, and pack ice surrounded Iceland for much of the year. The climatic events of the Little Ice Age did more than help shape the modern world. They are the deeply important context for the current unprecedented global warming. The Little Ice Age was far from a deep freeze, however; rather an irregular seesaw of rapid climatic shifts, few lasting more than a quarter-century, driven by complex and still little understood interactions between the atmosphere and the ocean. The seesaw brought cycles of intensely cold winters and easterly winds, then switched abruptly to years of heavy spring and early summer rains, mild winters, and frequent Atlantic storms, or to periods of droughts, light northeasterly winds, and summer heat waves.

**C.** Reconstructing the climate changes of the past is extremely difficult, because systematic weather observations began only a few centuries ago, in Europe and North America. Records from India and tropical Africa are even more recent. For the time

before records began, we have only 'proxy records' reconstructed largely from tree rings and ice cores, supplemented by a few incomplete written accounts. We now have hundreds of tree-ring records from throughout the northern hemisphere, and many from south of the equator, too, amplified with a growing body of temperature data from ice cores drilled in Antarctica, Greenland, the Peruvian Andes, and other locations. We are close to a knowledge of annual summer and winter temperature variations over much of the northern hemisphere going back 600 years.

Questions 18-22

*Complete the summary using the list of words, A-I, below.*

*Write the correct letter, A-I, in boxes 18-22 on your answer sheet.*

### Weather during the Little Ice Age

Documentation of past weather conditions is limited: our main sources of knowledge of conditions in the distant past are **18** .....and **19** .....We can deduce that the Little Ice Age was a time of **20** .....rather than of consistent freezing. Within it there were some periods of very cold winters, others of **21** .....and heavy rain, and yet others that saw **22** .....with no rain at all.

<b>A</b>	climatic shifts	ice cores	tree rings
<b>D</b>	glaciers	interactions	weather observations
<b>G</b>	heat waves	storms	written accounts

## V08 - TABLE/ FLOW CHART COMPLETION

### Example 1.

#### SHEET GLASS MANUFACTURE: THE FLOAT PROCESS

**A.** Glass, which has been made since the time of the Mesopotamians and Egyptians, is little more than a mixture of sand, soda ash and lime. When heated to about 1500 degrees Celsius (°C) this becomes a molten mass that hardens when slowly cooled. The first successful method for making clear, flat glass involved spinning . This method was very effective as the glass had not touched any surfaces between being soft and becoming hard, so it stayed perfectly unblemished , with a 'fire finish'. However, the process took a long time and was labour intensive .

**B.** Nevertheless, demand for flat glass was very high and glassmakers across the world were looking for a method of making it continuously. The first continuous ribbon process involved squeezing molten glass through two hot rollers, similar to an old mangle. This allowed glass of virtually any thickness to be made non-stop, but the rollers would leave both sides of the glass marked , and these would then need to be ground and polished. This part of the process rubbed away around 20 per cent of the glass, and the machines were very expensive.

Questions 1-8

*Complete the table and diagram below.*

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

*Write your answers in boxes 1-8 on your answer sheet.*

#### Early methods of producing flat glass

Method	Advantages	Disadvantages
1 .....	<ul style="list-style-type: none"> <li>Glass remained 2 .....</li> </ul>	<ul style="list-style-type: none"> <li>Slow</li> <li>3 .....</li> </ul>
Ribbon	<ul style="list-style-type: none"> <li>Could produce glass sheets of varying 4 .....</li> <li>Non-stop process</li> </ul>	<ul style="list-style-type: none"> <li>Glass was 5 .....</li> <li>20% of glass rubbed away</li> <li>Machines were expensive</li> </ul>

## Example 2.

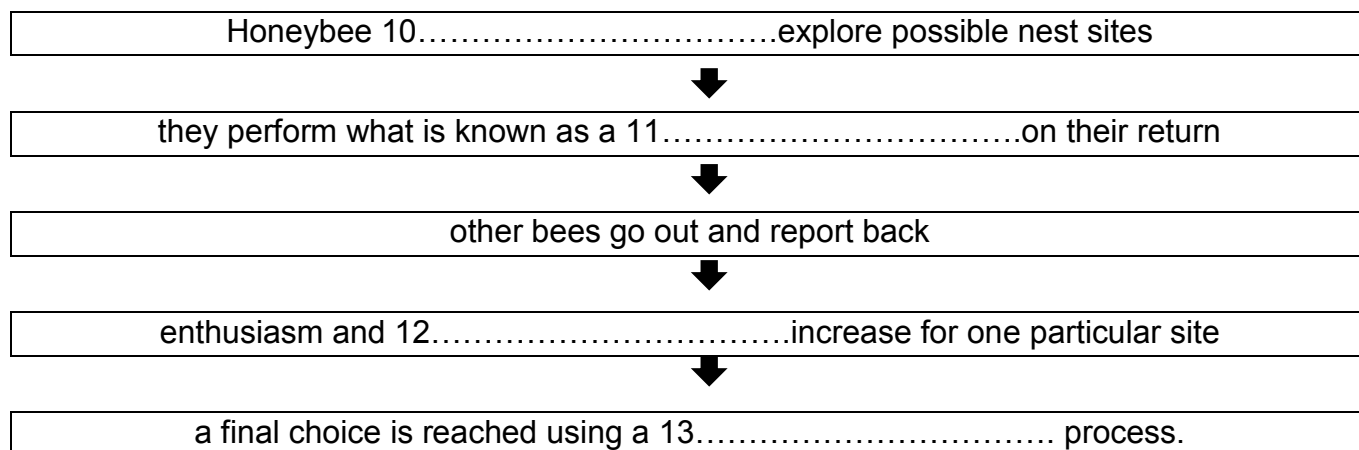
### SECRETS OF THE SWARM

Miller explains that he first really understood the impact that swarm behaviour could have on humans when he read a study of honeybees by Tom Seeley, a biologist at Cornell University. The honeybees choose a group which new nest to move to. First, scouts fly off to investigate multiple sites. When they return they do a 'waggle dance' for their spot, and other scouts will then fly off and investigate it. Many bees go out, but none tries to compare all sites. Each reports back on just one. The more they liked their nest, the more vigorous and lengthy their waggle dance and the more bees will choose to visit it. Gradually the volume of bees builds up towards one site; it's a system that ensures that support for the best site snowballs and the decision is made in the most democratic way.

Complete the flow-chart below.

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

#### How honeybees choose a new nest



**Example 3.****THE DOVER BRONZE-AGE BOAT**

**A.** It was 1992. In England, workmen were building a new road through the heart of Dover, to connect the ancient port and the Channel Tunnel, which, when it opened just two years later, was to be the first land link between Britain and Europe for over 10,000 years. A small team from the Canterbury Archaeological Trust (CAT) worked alongside the workmen, recording new discoveries brought to light by the machines.

**B.** At the base of a deep shaft six metres below the modern streets a wooden structure was revealed. Cleaning away the waterlogged site overlying the timbers, archeologists realized its true nature. They had found a prehistoric boat, preserved by the type of sediment in which it was buried. It was then named the Dover Bronze-Age Boat.

**C.** With hindsight, it was significant that the boat was found and studied by mainstream archaeologists who naturally focused on its cultural context. At the time, ancient boats were often considered only from a narrower technological perspective, but news about the Dover boat reached a broad audience. In 2002, on the tenth anniversary of the discovery, the Dover Bronze-Age Boat Trust hosted a conference, where this meeting of different traditions became apparent. Alongside technical papers about the boat, other speakers explored its social and economic contexts, and the religious perceptions of boats in Bronze-Age societies. Many speakers came from overseas, and debate about cultural connections was renewed.

**D.** Detailed proposals to reconstruct the boat were drawn up in 2004. Archaeological evidence was beginning to suggest a Bronze-Age community straddling the Channel, brought together by the sea, rather than separated by it. In a region today divided by language and borders, archaeologists had a duty to inform the general public about their common cultural heritage.

**E.** The boat project began in England but it was conceived from the start as a European collaboration. Reconstruction was only part of a scheme that would include a major exhibition and an extensive educational and outreach programme. Discussions began early in 2005 with

archaeological bodies, universities and heritage organizations either side of the Channel. There was much enthusiasm and support, and an official launch of the project was held at an international seminar in France in 2007. Financial support was confirmed in 2008 and the project then named BOAT 1550BC got under way in June 2011.

**F.** A small team began to make the boat at the start of 2012 on the Roman Lawn outside Dover museum. A full-scale reconstruction of a mid-section had been made in 1996, primarily to see how Bronze-Age replica tools performed. In 2012, however, the hull shape was at the centre of the work; so modern power tools were used to carve the oak planks, before turning to prehistoric tools for finishing. It was decided to make the replica half-scale for reasons of cost and time, and synthetic materials were used for the stitching, owing to doubts about the scaling and tight timetable.

**G.** Meanwhile, the exhibition was being prepared ready for opening in July 2012 at the Castle Museum in Boulogne-sur-Mer. Entitled 'Beyond the Horizon: Societies of the Channel & North Sea 3,500 years ago', it brought together for the first time a remarkable collection of Bronze-Age objects, including many new discoveries for commercial archaeology and some of the great treasure of the past. The reconstructed boat, as a symbol of the maritime connections that bound together the communities either side of the Channel, was the centerpiece.

Questions 1 – 5

Complete the flow chart below.

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

**Key events**

1992 – the boat was discovered during the construction of a 1.....



2002 – an international 2.....was held to gather information



2004 – 3 ..... for the construction were produced



2007 – the 4.....of BOAT 1550BC took place



2012 – the Bronze Age 5..... featured the boat and other objects.

---

## V09 - PLAN/MAP COMPLETION

### Example 1.

#### A CHRONICLE OF TIMEKEEPING

To address this, a variation on the original escapement was invented in 1670, in England. It was called the anchor escapement, which was a lever-based device shaped like a ship's anchor. The motion of a pendulum rocks this device so that it catches and then releases each tooth of the escape wheel, in turn allowing it to turn a precise amount. Unlike the original form used in early pendulum clocks, the anchor escapement permitted the pendulum to travel in a very small arc. Moreover, this invention allowed the use of a long pendulum which could beat once a second and thus led to the development of a new floor-standing case design, which became known as the grandfather clock.

Questions 9-13

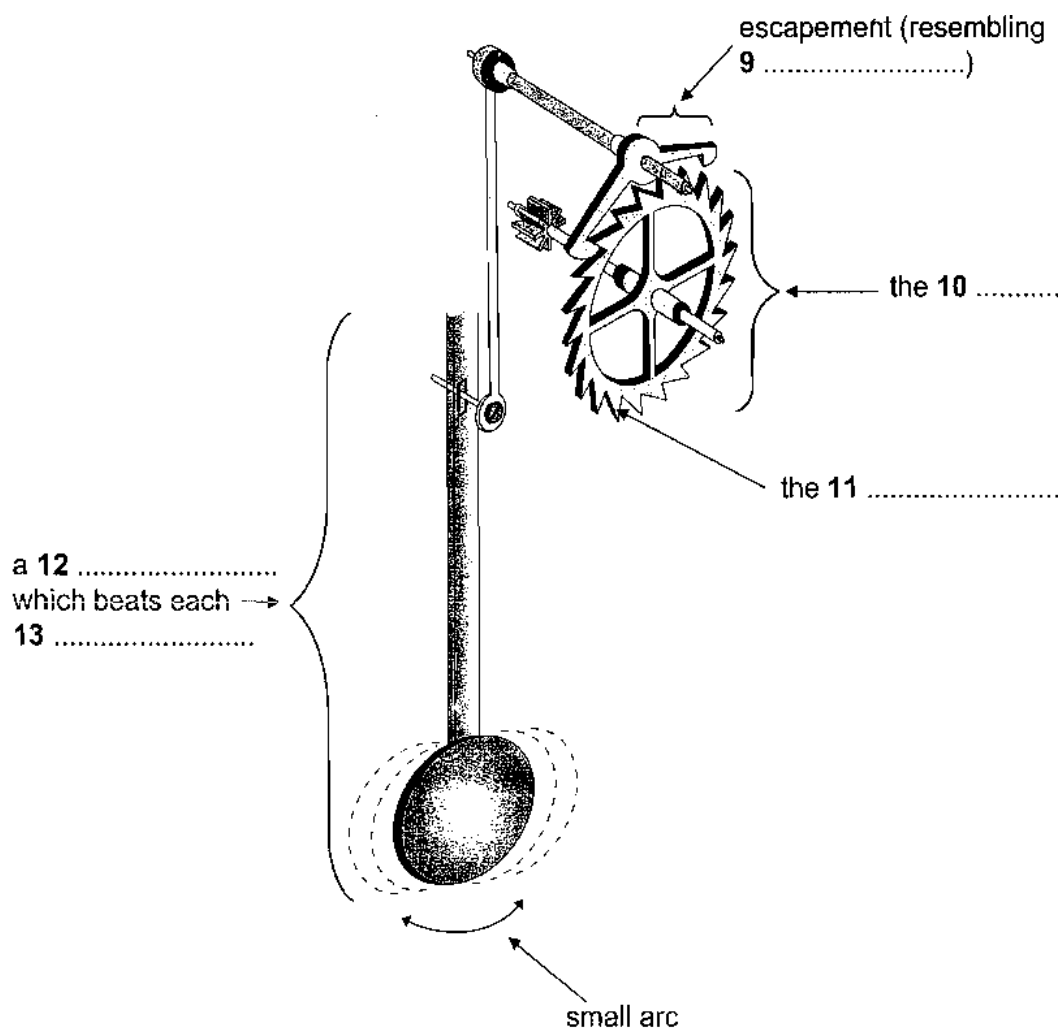
*Label the diagram below.*

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

*Write your answers in boxes 9-13 on your answer sheet.*



### How the 1670 lever-based device worked



## Example 2.

### TIDAL POWER

**A.** A marine turbine blade needs to be only one third of the size of a wind generator to produce three times as much power. The blades will be about 20 metres in diameter, so around 30 metres of water is required. Unlike wind power, there are unlikely to be environmental objections. Fish and other creatures are thought unlikely to be at risk from the relatively slow-turning blades. Each turbine will be mounted on a tower which will connect to the national power supply grid via underwater cables. The towers will stick out of the water and be lit, to warn shipping, and also be designed to be lifted out of the water for maintenance and to clean seaweed from the blades.

**B.** Dr Bahaj has done most work on the Alderney site, where there are powerful currents. The single undersea turbine farm would produce far more power than needed for the Channel Islands and most would be fed into the French Grid and be re-imported into Britain via the cable under the Channel.

**C.** One technical difficulty is cavitation, where low pressure behind a turning blade causes air bubbles. These can cause vibration and damage the blades of the turbines. Dr Bahaj said: 'We have to test a number of blade types to avoid this happening or at least make sure it does not damage the turbines or reduce performance. Another slight concern is submerged debris floating into the blades. So far we do not know how much of a problem it might be. We will have to make the turbines robust because the sea is a hostile environment, but all the signs that we can do it are good.'

Questions 23-26

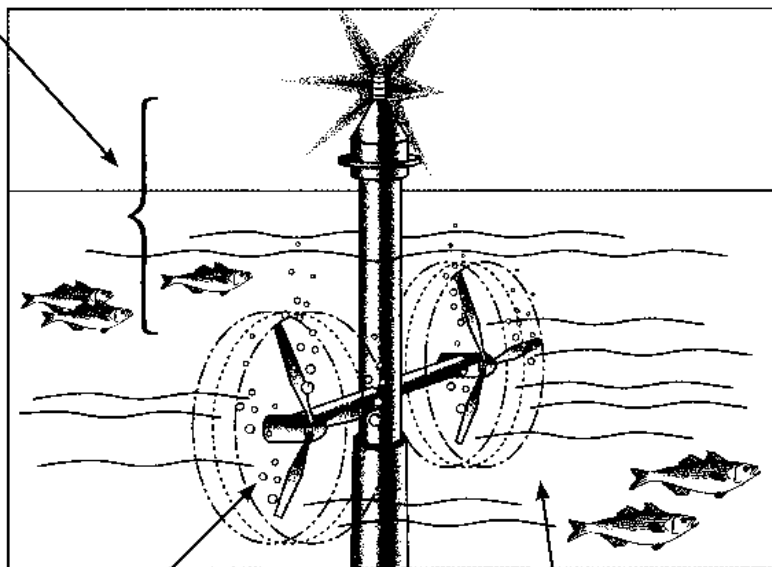
*Label the diagram below.*

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

*Write your answers in boxes 23-26 on your answer sheet.*

## An Undersea Turbine

Whole tower can be raised  
for **23** ..... and the extraction  
of seaweed from the blades



Air bubbles result from  
the **25** ..... behind blades.  
This is known as **26** .....

Sea life not in danger due to the  
fact that blades are comparatively  
**24** .....

**Example 3.****COLLECTING ANT SPECIMENS**

**A.** Baits can be used to attract and concentrate foragers. This often increases the number of individuals collected and attracts species that are otherwise elusive. Sugars and meats or oils will attract different species and a range should be utilised. These baits can be placed either on the ground or on the trunks of trees or large shrubs. When placed on the ground, baits should be situated on small paper cards or other flat, light-coloured surfaces, or in test-tubes or vials. This makes it easier to spot ants and to capture them before they can escape into the surrounding leaf litter .

**B.** Many ants are small and forage primarily in the layer of leaves and other debris on the ground. Collecting these species by hand can be difficult. One of the most successful ways to collect them is to gather the leaf litter in which they are foraging and extract the ants from it. This is most commonly done by placing leaf litter on a screen over a large funnel, often under some heat . As the leaf litter dries from above, ants (and other animals) move downward and eventually fall out the bottom and are collected in alcohol placed below the funnel. This method works especially well in rain forests and marshy areas . A method of improving the catch when using a funnel is to sift the leaf litter through a coarse screen before placing it above the funnel. This will concentrate the litter and remove larger leaves and twigs. It will also allow more litter to be sampled when using a limited number of funnels.

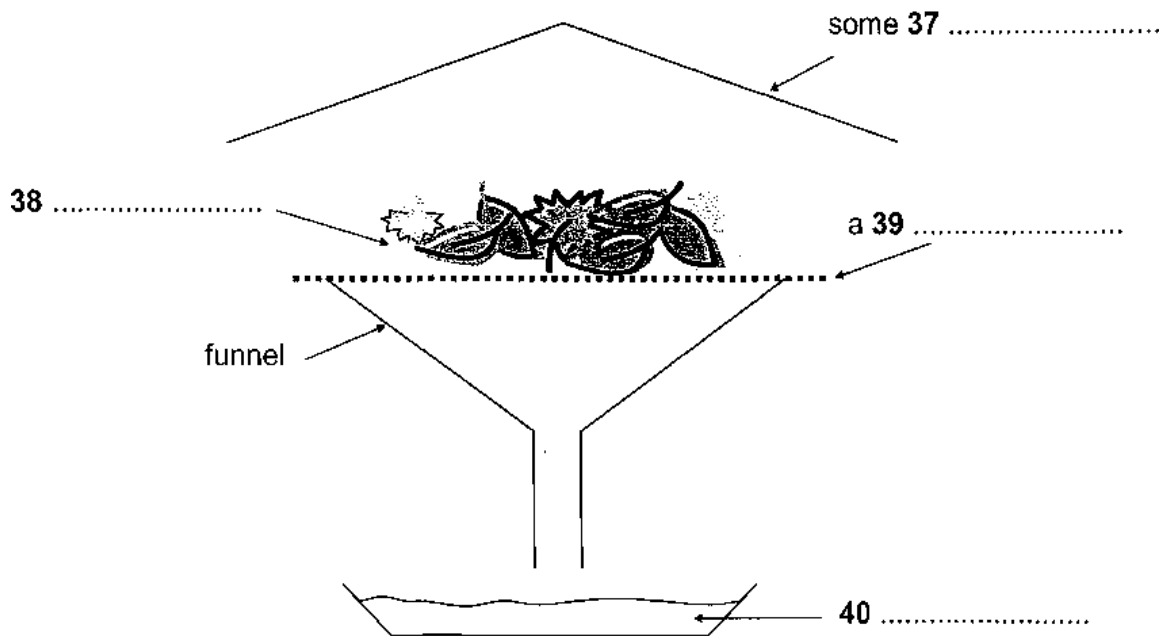
Questions 37-40

*Label the diagram below.*

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

*Write your answers in boxes 37-40 on your answer sheet.*

## One method of collecting ants



## V10 - TRUE/ FALSE/ NOT GIVEN – YES/ NO/ NOT GIVEN

### TRUE/ FALSE/ NOT GIVEN

	Reading passage	Questions	Defining True/ False/ Not given and state the reason why?
1	It was only after the creation of the FAA that full-scale regulation of America's airspace took place, and this was fortuitous, for the advent of the jet engine suddenly resulted in a large number of very fast planes, reducing pilots' margin of error and practically demanding some set of rules to keep everyone well separated and operating safely in the air.	The FAA was created as a result of the introduction of the jet engine.	
2	As a student at the City of London School, Perkin became immersed in the study of chemistry. His talent and devotion to the subject were perceived by his teacher, Thomas Hall, who encouraged him to attend a series of lectures given by the eminent scientist Michael Faraday at the Royal Institution.	Michael Faraday was the first person to recognise Perkin's ability as a student of chemistry.	
3	Perkin's scientific gifts soon caught Hofmann's attention and, within two years, he became Hofmann's youngest assistant	Perkin employed August Wilhelm Hofmann as his assistant.	
4	At the time, quinine was the only viable medical treatment for malaria. The drug is derived from the bark of the cinchona tree, native to South America, and by 1856 demand for the drug was surpassing the available supply.	The trees from which quinine is derived grow only in South America.	
5	During his vacation in 1856, Perkin spent his time in the laboratory on the top floor of his family's house. He was attempting to manufacture quinine from aniline, an inexpensive and readily available coal tar waste product.	Perkin hoped to manufacture a drug from a coal tar waste product.	
6	Marie Curie is probably the most famous woman scientist who has ever lived. Born Maria	Marie Curie's husband was a joint winner of	

	Sklodowska in Poland in 1867, she is famous for her work on radioactivity, and was twice a winner of the Nobel Prize. With her husband, Pierre Curie, and Henri Becquerel, she was awarded the 1903 Nobel Prize for Physics, and was then sole winner of the 1911 Nobel Prize for Chemistry .	both Marie's Nobel Prizes.	
7	Based on the results of this research, Marie Curie received her Doctorate of Science, and in 1903 Marie and Pierre shared with Becquerel the Nobel Prize for Physics for the discovery of radioactivity. The births of Marie's two daughters, Irène and Eve, in 1897 and 1904 failed to interrupt her scientific work.	Marie stopped doing research for several years when her children were born.	
8	The sudden death of her husband in 1906 was a bitter blow to Marie Curie, but was also a turning point in her career: henceforth she was to devote all her energy to completing alone the scientific work that they had undertaken. On May 13, 1906, she was appointed to the professorship that had been left vacant on her husband's death , becoming the first woman to teach at the Sorbonne.	Marie took over the teaching position her husband had held.	
9	Many experts give California high marks for making progress on preparedness in recent years , after some of the largest fires in state history scorched thousands of acres, burned thousands of homes, and killed numerous people.	Many experts believe California has made little progress in readying itself to fight fires.	
10	Stung in the past by criticism of bungling that allowed fires to spread when they might have been contained , personnel are meeting the peculiar challenges of neighborhood - and canyon- hopping fires better than previously, observers say.	Personnel in the past have been criticised for mishandling fire containment.	

**YES/ NO/ NOT GIVEN**

	Reading passage	Questions	Defining Yes/ No/ Not given and state the reason why?
<b>1</b>	It's not important, then, if there's a delay of a few years, or decades, while the human race debates the question of whether to reply, and perhaps carefully drafts a reply, if a signal from the universe is received .	If a signal from outer space is received, it will be important to respond promptly.	
<b>2</b>	Bernstein says that Diels's system is attracting lots of interest from the power companies. But they have not yet come up with the \$5 million that EPRI says will be needed to develop a commercial system , by making the lasers yet smaller and cheaper.	Power companies have given Diels enough money to develop his laser.	
<b>3</b>	One glaring disadvantage of pesticides' application is that, while destroying harmful pests, they also wipe out many useful non-targeted organisms, which keep the growth of the pest population in check. This results in what agro-ecologists call the 'treadmill syndrome'. Because of their tremendous breeding potential and genetic diversity, many pests are known to withstand synthetic chemicals and bear offspring with a built-in resistance to pesticides .	A number of pests are now born with an innate immunity to some pesticides.	
<b>4</b>	When handled by experts, bio-control is safe, non-polluting and self-dispersing.	Bio-control is free from danger under certain circumstances.	
<b>5</b>	According to Wagner's analysis of the Bachia family tree, the toed species re-evolved toes from toeless ancestors and, what is more, digit loss and gain has occurred on more than one	Wagner believes that Bachia lizards with toes had toeless ancestors.	



	occasion over tens of millions of years .		
6	More recently, however, examples have been reported that break the time limit, suggesting that silent genes may not be the whole story. In a paper published last year, biologist Gunter Wagner of Yale University reported some work on the evolutionary history of a group of South American lizards called Bachia.	Wagner was the first person to do research on South American lizards.	
7	Nasa notes that a lot of time is spent wondering about and searching for proof of liquid water on Mars, which would be a signal of life. But the new pictures show that the planet itself was once far more alive than it is today – made up of flowing molten lava that spread across its surface.	The photos show that the surface of Mars is more active than ever.	

**Example 1.****STEPWELLS**

*A millennium ago, stepwells were fundamental to life in the driest parts of India. Although many have been neglected, recent restoration has returned them to their former glory. Richard Cox travelled to north-western India to document these spectacular monuments from a bygone era.*

**A.** During the sixth and seventh centuries, the inhabitants of the modern-day states of Gujarat and Rajasthan in North-western India developed a method of gaining access to clean, fresh groundwater during the dry season for drinking, bathing, watering animals and irrigation. However, the significance of this invention – the stepwell – goes beyond its utilitarian application.

**B.** Unique to the region, stepwells are often architecturally complex and vary widely in size and shape. During their heyday, they were places of gathering, of leisure, of relaxation and of worship for villagers of all but the lowest castes. Most stepwells are found dotted around the desert areas of Gujarat (where they are called vav) and Rajasthan (where they are known as baori), while a few also survive in Delhi. Some were located in or near villages as public spaces for the community; others were positioned beside roads as resting places for travellers.

**C.** As their name suggests, stepwells comprise a series of stone steps descending from ground level to the water source (normally an underground aquifer) as it recedes following the rains. When the water level was high, the user needed only to descend a few steps to reach it; when it was low, several levels would have to be negotiated.

**Questions 1–5**

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

*In boxes 1–5 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 Examples of ancient stepwells can be found all over the world.
- 2 Stepwells had a range of functions, in addition to those related to water collection.
- 3 The few existing stepwells in Delhi are more attractive than those found elsewhere.
- 4 It took workers many years to build the stone steps characteristic of stepwells.
- 5 The number of steps above the water level in a stepwell altered during the course of a year.

---

**Example 2.****EUROPEAN TRANSPORT SYSTEMS 1990-2010**

**A.** It is difficult to conceive of vigorous economic growth without an efficient transport system. Although modern information technologies can reduce the demand for physical transport by facilitating teleworking and teleservices, the requirement for transport continues to increase . There are two key factors behind this trend. For passenger transport, the determining factor is the spectacular growth in car use . The number of cars on European Union (EU) roads saw an increase of three million cars each year from 1990 to 2010, and in the next decade the EU will see a further substantial increase in its fleet.

**B.** As far as goods transport is concerned, growth is due to a large extent to changes in the European economy and its system of production . In the last 20 years, as internal frontiers have been abolished, the EU has moved from a "stock" economy to a "flow" economy. This phenomenon has been emphasised by the relocation of some industries, particularly those which are labour intensive, to reduce production costs, even though the production site is hundreds or even thousands of kilometres away from the final assembly plant or away from users .

**C.** The strong economic growth expected in countries which are candidates for entry to the EU will also increase transport flows, in particular road haulage traffic . In 1998, some of these countries already exported more than twice their 1990 volumes and imported more than five times their 1990 volumes. And although many candidate countries inherited a transport system which encourages rail, the distribution between modes has tipped sharply in favour of road transport since the 1990s. Between 1990 and 1998, road haulage increased by 19.4%, while during the same period rail haulage decreased by 43.5%, although – and this could benefit the enlarged EU – it is still on average at a much higher level than in existing member states.

**D.** However, a new imperative-sustainable development – offers an opportunity for adapting the EU's common transport policy. This objective, agreed by the Gothenburg European

Council, has to be achieved by integrating environmental considerations into Community policies, and shifting the balance between modes of transport lies at the heart of its strategy. The ambitious objective can only be fully achieved by 2020, but proposed measures are nonetheless a first essential step towards a sustainable transport system which will ideally be in place in 30 years' time, that is by 2040 .

**E.** In 1998, energy consumption in the transport sector was to blame for 28% of emissions of CO<sub>2</sub>, the leading greenhouse gas . According to the latest estimates, if nothing is done to reverse the traffic growth trend, CO<sub>2</sub> emissions from transport can be expected to increase by around 50% to 1,113 billion tonnes by 2020, compared with the 739 billion tonnes recorded in 1990 . Once again, road transport is the main culprit since it alone accounts for 84% of the CO<sub>2</sub> emissions attributable to transport. Using alternative fuels and improving energy efficiency is thus both an ecological necessity and a technological challenge.

### Questions 22-26

*Do the following statements agree with the information given in Reading Passage 2?*

*In boxes 22-26 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

**22** The need for transport is growing, despite technological developments.

**23** To reduce production costs, some industries have been moved closer to their relevant consumers.

**24** Cars are prohibitively expensive in some EU candidate countries.

**25** The Gothenburg European Council was set up 30 years ago.

**26** By the end of this decade, CO<sub>2</sub> emissions from transport are predicted to reach 739 billion tonnes.

**Example 3.****TEA AND THE INDUSTRIAL REVOLUTION**

**A.** Macfarlane compares the puzzle to a combination lock. ‘ There are about 20 different factors and all of them need to be present before the revolution can happen ,’ he says. For industry to take off, there needs to be the technology and power to drive factories, large urban populations to provide cheap labour, easy transport to move goods around, an affluent middle-class willing to buy mass-produced objects, a market-driven economy and a political system that allows this to happen. While this was the case for England, other nations, such as Japan, the Netherlands and France also met some of these criteria but were not industrialising. All these factors must have been necessary. But not sufficient to cause the revolution, says Macfarlane. ‘After all, Holland had everything except coal while China also had many of these factors. Most historians are convinced there are one or two missing factors that you need to open the lock.’

**B.** The missing factors, he proposes, are to be found in almost even kitchen cupboard. Tea and beer, two of the nation’s favourite drinks, fuelled the revolution . The antiseptic properties of tannin, the active ingredient in tea, and of hops in beer – plus the fact that both are made with boiled water – allowed urban communities to flourish at close quarters without succumbing to water-borne diseases such as dysentery . The theory sounds eccentric but once he starts to explain the detective work that went into his deduction, the scepticism gives way to wary admiration. Macfarlanes case has been strengthened by support from notable quarters – Roy Porter, the distinguished medical historian, recently wrote a favourable appraisal of his research .

**C.** Macfarlane had wondered for a long time how the Industrial Revolution came about. Historians had alighted on one interesting factor around the mid-18th century that required explanation. Between about 1650 and 1740, the population in Britain was static. But then there was a burst in population growth . Macfarlane says: ‘The infant mortality rate halved in the space of 20 years, and this happened in both rural areas and cities, and across all classes. People suggested four possible causes. Was there a sudden change in the viruses and bacteria around? Unlikely. Was there a revolution in medical science? But this was a

century before Lister's revolution\*. Was there a change in environmental conditions? There were improvements in agriculture that wiped out malaria, but these were small gains. Sanitation did not become widespread until the 19th century. The only option left is food. But the height and weight statistics show a decline. So the food must have got worse. Efforts to explain this sudden reduction in child deaths appeared to draw a blank . '

**D.** This population burst seemed to happen at just the right time to provide labour for the Industrial Revolution. 'When you start moving towards an industrial revolution, it is economically efficient to have people living close together,' says Macfarlane. 'But then you get disease, particularly from human waste.' Some digging around in historical records revealed that there was a change in the incidence of water-borne disease at that time, especially dysentery. Macfarlane deduced that whatever the British were drinking must have been important in regulating disease. He says, 'We drank beer. For a long time, the English were protected by the strong antibacterial agent in hops, which were added to help preserve the beer. But in the late 17th century a tax was introduced on malt, the basic ingredient of beer. The poor turned to water and gin and in the 1720s the mortality rate began to rise again. Then it suddenly dropped again. What caused this ?'

### 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** China's transport system was not suitable for industry in the 18th century.

**9** Tea and beer both helped to prevent dysentery in Britain.

**10** Roy Porter disagrees with Professor Macfarlane's findings.

**11** After 1740, there was a reduction in population in Britain.

**12** People in Britain used to make beer at home.

**13** The tax on malt indirectly caused a rise in the death rate.

## V11 - MATCHING FEATURES

### Example 1.

#### GIFTED CHILDREN AND LEARNING

**A.** High achievers have been found to use self-regulatory learning strategies more often and more effectively than lower achievers, and are better able to transfer these strategies to deal with unfamiliar tasks. This happens to such a high degree in some children that they appear to be demonstrating talent in particular areas. Overviewing research on the thinking process of highly able children, ( Shore and Kanevsky , 1993) put the instructor's problem succinctly: ' If they [the gifted] merely think more quickly, then we need only teach more quickly. If they merely make fewer errors, then we can shorten the practice '. But of course, this is not entirely the case; adjustments have to be made in methods of learning and teaching, to take account of the many ways individuals think.

**B.** Yet in order to learn by themselves, the gifted do need some support from their teachers. Conversely, teachers who have a tendency to 'overdirect' can diminish their gifted pupils' learning autonomy . Although ' spoon-feeding ' can produce extremely high examination results, these are not always followed by equally impressive life successes. Too much dependence on the teachers risks loss of autonomy and motivation to discover. However, when teachers o pupils to reflect on their own learning and thinking activities, they increase their pupils' self-regulation. For a young child, it may be just the simple question 'What have you learned today?' which helps them to recognise what they are doing. Given that a fundamental goal of education is to transfer the control of learning from teachers to pupils, improving pupils' learning to learn techniques should be a major outcome of the school experience, especially for the highly competent. There are quite a number of new methods which can help, such as child- initiated learning, ability-peer tutoring, etc. Such practices have been found to be particularly useful for bright children from deprived areas .

**C.** But scientific progress is not all theoretical, knowledge is a so vital to outstanding performance: individuals who know a great deal about a specific domain will achieve at a higher level than those who do not ( Elshout , 1995) . Research with creative scientists by Simonton (1988) brought him to the conclusion that above a certain high level, characteristics



such as independence seemed to contribute more to reaching the highest levels of expertise than intellectual skills, due to the great demands of effort and time needed for learning and practice. Creativity in all forms can be seen as expertise se mixed with a high level of motivation ( Weisberg , 1993).

**D.** To sum up, learning is affected by emotions of both the individual and significant others. Positive emotions facilitate the creative aspects of earning and negative emotions inhibit it. Fear, for example, can limit the development of curiosity, which is a strong force in scientific advance, because it motivates problem-solving behaviour . In Boekaerts ' (1991) review of emotion the learning of very high IQ and highly achieving children, she found emotional forces in harness. They were not only curious, but often had a strong desire to control their environment, improve their learning efficiency and increase their own learning resources.

### Questions 18-22

*Look at the following statements (Questions 18-22) and the list of people below.*

*Match each statement with the correct person or people, **A-E**.*

*Write the correct letter, **A-E**, in boxes **18-22** on your answer sheet.*

**18** Less time can be spent on exercises with gifted pupils who produce accurate work.

**19** Self-reliance is a valuable tool that helps gifted students reach their goals.

**20** Gifted children know how to channel their feelings to assist their learning.

**21** Really successful students have learnt a considerable amount about their subject.

### List of People

**A** Shore and Kanevsky

**B** Elshout

**C** Simonton

**D** Boekaerts

**Example 2.****SECOND NATURE**

**A.** The evidence is good that most personality traits can be altered,' says Christopher Peterson , professor of psychology at the University of Michigan, who cites himself as an example. Inherently introverted, he realised early on that as an academic, his reticence would prove disastrous in the lecture hall. So he learned to be more outgoing and to entertain his classes. 'Now my extroverted behaviour is spontaneous , ' he says.

**B.** David Fajgenbaum had to make a similar transition. He was preparing for university, when he had an accident that put an end to his sports career. On campus, he quickly found that beyond ordinary counselling, the university had no services for students who were undergoing physical rehabilitation and suffering from depression like him. He therefore launched a support group to help others in similar situations. He took action despite his own pain - a typical response of an optimist.

**C.** Suzanne Segerstrom , professor of psychology at the University of Kentucky, believes that the key to increasing optimism is through cultivating optimistic behaviour, rather than positive thinking. She recommends you train yourself to pay attention to good fortune by writing down three positive things that come about each day. This will help you convince yourself that favourable outcomes actually happen all the time, making it easier to begin taking action.

**D.** You can recognise a person who is passionate about a pursuit by the way they are so strongly involved in it. Tanya Streeter's passion is freediving - the sport of plunging deep into the water without tanks or other breathing equipment. Beginning in 1998, she set nine world records and can hold her breath for six minutes. The physical stamina required for this sport is intense but the psychological demands are even more overwhelming. Streeter learned to untangle her fears from her judgment of what her body and mind could do. 'In my career as a competitive freediver, there was a limit to what I could do - but it wasn't anywhere near what I thought it was/ she says.

**E.** Finding a pursuit that excites you can improve anyone's life. The secret about consuming passions, though, according to psychologist Paul Silvia of the University of North Carolina, is that 'they require discipline, hard work and ability, which is why they are so rewarding.' Psychologist Todd Kashdan has this advice for those people taking up a new passion: 'As a newcomer, you also have to tolerate and laugh at your own ignorance. You must be willing to accept the negative feelings that come your way,' he says.

**F.** Usually, we think of courage in physical terms but ordinary life demands something else. For marketing executive Kenneth Pedeleose, it meant speaking out against something he thought was ethically wrong. The new manager was intimidating staff so Pedeleose carefully recorded each instance of bullying and eventually took the evidence to a senior director, knowing his own job security would be threatened. Eventually the manager was the one to go. According to Cynthia Pury, a psychologist at Clemson University, Pedeleose's story proves the point that courage is not motivated by fearlessness, but by moral obligation. Pury also believes that people can acquire courage. Many of her students said that faced with a risky situation, they first tried to calm themselves down, then looked for a way to mitigate the danger, just as Pedeleose did by documenting his allegations.

### Questions 19-22

*Match each statement with the correct person, A-G.*

*Write the correct letter, A-G, in boxes 19-22 on your answer sheet.*

- 19** People must accept that they do not know much when first trying something new.  
**20** It is important for people to actively notice when good things happen.  
**21** Courage can be learned once its origins in a sense of responsibility are understood.  
**22** It is possible to overcome shyness when faced with the need to speak in public.

### List of People

- |                               |                            |
|-------------------------------|----------------------------|
| <b>A</b> Christopher Peterson | <b>E</b> Todd Kashdan      |
| <b>B</b> David Fajgenbaum     | <b>F</b> Kenneth Pedeleose |
| <b>C</b> Suzanne Segerstrom   | <b>G</b> Cynthia Pury      |
| <b>D</b> Tanya Streeter       |                            |

---

**Example 3.**

**A.** A new study conducted for the World Bank by Murdoch University's Institute for Science and Technology Policy (ISTP) has demonstrated that public transport is more efficient than cars. The study compared the proportion of wealth poured into transport by thirty-seven cities around the world . This included both the public and private costs of building, maintaining and using a transport system.

**B.** The study found that the Western Australian city of Perth is a good example of a city with minimal public transport. As a result, 17% of its wealth went into transport costs.

Some European and Asian cities, on the other hand, spent as little as 5% . Professor Peter Newman, ISTP Director, pointed out that these more efficient cities were able to put the difference into attracting industry and jobs or creating a better place to live .

**C.** According to Professor Newman, the larger Australian city of Melbourne is a rather unusual city in this sort of comparison. He describes it as two cities: 'A European city surrounded by a car-dependent one'. Melbourne's large tram network has made car use in the inner city much lower, but the outer suburbs have the same car-based structure as most other Australian cities. The explosion in demand for accommodation in the inner suburbs of Melbourne suggests a recent change in many people's preferences as to where they live. Newman says this is a new, broader way of considering public transport issues. In the past, the case for public transport has been made on the basis of environmental and social justice considerations rather than economics. Newman, however, believes the study demonstrates that 'the auto-dependent city model is inefficient and grossly inadequate in economic as well as environmental terms'.

**D.** Bicycle use was not included in the study but Newman noted that the two most 'bicycle friendly' cities considered - Amsterdam and Copenhagen - were very efficient, even though their public transport systems were 'reasonable but not special' .

**E.** It is common for supporters of road networks to reject the models of cities with good public transport by arguing that such systems would not work in their particular city. One objection

is climate. Some people say their city could not make more use of public transport because it is either too hot or too cold. Newman rejects this, pointing out that public transport has been successful in both Toronto and Singapore and, in fact, he has checked the use of cars against climate and found 'zero correlation'.

**F.** When it comes to other physical features, road lobbies are on stronger ground. For example, Newman accepts it would be hard for a city as hilly as Auckland to develop a really good rail network. However, he points out that both Hong Kong and Zurich have managed to make a success of their rail systems, heavy and light respectively, though there are few cities in the world as hilly.

**G.** In fact, Newman believes the main reason for adopting one sort of transport over another is politics: 'The more democratic the process, the more public transport is favored.' He considers Portland, Oregon, a perfect example of this. Some years ago, federal money was granted to build a new road. However, local pressure groups forced a referendum over whether to spend the money on light rail instead. The rail proposal won and the railway worked spectacularly well. In the years that have followed, more and more rail systems have been put in, dramatically changing the nature of the city. Newman notes that Portland has about the same population as Perth and had a similar population density at the time.

Questions 11-13

*Look at the following cities ( Questions 11-13) and the list of descriptions below.*

*Match each city with the correct description, **A-F**.*

*Write the correct letter, **A-F**, in boxes 11-13 on your answer sheet.*

### List of Descriptions

- A** successfully uses a light rail transport system in hilly environment
- B** successful public transport system despite cold winters
- C** profitably moved from road to light rail transport system
- D** hilly and inappropriate for rail transport system
- E** heavily dependent on cars despite widespread poverty
- F** inefficient due to a limited public transport system

- |           |          |
|-----------|----------|
| <b>11</b> | Perth    |
| <b>12</b> | Auckland |
| <b>13</b> | Portland |

## V12 - MATCHING SENTENCE ENDINGS

### Example 1.

#### WHAT'S SO FUNNY?

##### John McCrone reviews recent research on humour

**A.** Making a rapid emotional assessment of the events of the moment is an extremely demanding job for the brain, animal or human. Energy and arousal levels may need to be retuned in the blink of an eye. These abrupt changes will produce either positive or negative feelings. The orbital cortex, the region that becomes active in Goel's experiment, seems the best candidate for the site that feeds such feelings into higher-level thought processes, with its close connections to the brain's sub-cortical arousal apparatus and centres of metabolic control.

**B.** All warm-blooded animals make constant tiny adjustments in arousal in response to external events, but humans, who have developed a much more complicated internal life as a result of language, respond emotionally not only to their surroundings, but to their own thoughts. Whenever a sought-for answer snaps into place, there is a shudder of pleased recognition. Creative discovery being pleasurable, humans have learned to find ways of milking this natural response. The fact that jokes tap into our general evaluative machinery explains why the line between funny and disgusting, or funny and frightening, can be so fine. Whether a joke gives pleasure or pain depends on a person's outlook.

**C.** Humour may be a luxury, but the mechanism behind it is no evolutionary accident. As Peter Derks, a psychologist at William and Mary College in Virginia, says: 'I like to think of humour as the distorted mirror of the mind. It's creative, perceptual, analytical and lingual.'

### Questions 24—27

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

*Write the correct letter A-G in boxes 24-27 on your answer sheet.*

- A** react to their own thoughts.
- B** helped create language in humans.
- C** respond instantly to whatever is happening.
- D** may provide valuable information about the operation of the brain.
- E** cope with difficult situations.
- F** relate to a person's subjective views.
- G** led our ancestors to smile and then laugh.

- 24** One of the brain's most difficult tasks is to
- 25** Because of the language they have developed, humans
- 26** Individual responses to humour
- 27** Peter Derks believes that humour

**Example 2.****GREYING POPULATION STAYS IN THE PINK**

**A.** The increasing self-reliance of many elderly people is probably linked to a massive increase in the use of simple home medical aids . For instance, the use of raised toilet seats has more than doubled since the start of the study, and the use of bath seats has grown by more than 50%. These developments also bring some health benefits, according to a report from the MacArthur Foundation's research group on successful ageing. The group found that those elderly people who were able to retain a sense of independence were more likely to stay healthy in old age.

**B.** Maintaining a level of daily physical activity may help mental functioning , says Carl Cotman, a neuroscientist at the University of California at Irvine. He found that rats that exercise on a treadmill have raised levels of brain-derived neurotrophic factor coursing through their brains. Cotman believes this hormone, which keeps neurons functioning, may prevent the brains of active humans from deteriorating.

**C.** As part of the same study, Teresa Seeman, a social epidemiologist at the University of Southern California in Los Angeles, found a connection between self-esteem and stress in people over 70. In laboratory simulations of challenging activities such as driving, those who felt in control of their lives pumped out lower levels of stress hormones such as cortisol. Chronically high levels of these hormones have been linked to heart disease.

**D.** But independence can have drawbacks. Seeman found that elderly people who felt emotionally isolated maintained higher levels of stress hormones even when asleep . The research suggests that older people fare best when they feel independent but know they can get help when they need it.

**E.** 'Like much research into ageing, these results support common sense,' says Seeman. They also show that we may be underestimating the impact of these simple factors. 'The sort of thing that your grandmother always told you turns out to be right on target,' she says.



## Questions 23-26

Complete each sentence with the correct ending, **A-H**, below.

Write the correct letter, **A-H**, in boxes 23-26 on your answer sheet.

**A** may cause heart disease.

**B** can be helped by hormone treatment.

**C** may cause rises in levels of stress hormones.

**D** have cost the United States government more than \$200 billion.

**E** may help prevent mental decline.

**F** may get stronger at night.

**G** allow old people to be more independent.

**H** can reduce stress in difficult situations.

**23** Home medical aids

**24** Regular amounts of exercise

**25** Feelings of control over life

**26** Feelings of loneliness

**Example 3.****THE PSYCHOLOGY OF INNOVATION****Why are so few companies truly innovative?**

**A.** For Robert B. Cialdini, Professor of Psychology at Arizona State University, one reason that companies don't succeed as often as they should is that innovation starts with recruitment. Research shows that the fit between an employee's values and a company's values makes a difference to what contribution they make and whether, two years after they join, they're still at the company. Studies at Harvard Business School show that, although some individuals may be more creative than others, almost every individual can be creative in the right circumstances.

**B.** One of the most famous photographs in the story of rock'n'roll emphasises Cialdini's views. The 1956 picture of singers Elvis Presley, Carl Perkins, Johnny Cash and Jerry Lee Lewis jamming at a piano in Sun Studios in Memphis tells a hidden story. Sun's 'million-dollar quartet' could have been a quintet. Missing from the picture is Roy Orbison, a greater natural singer than Lewis, Perkins or Cash. Sam Phillips, who owned Sun, wanted to revolutionise popular music with songs that fused black and white music, and country and blues. Presley, Cash, Perkins and Lewis instinctively understood Phillips's ambition and believed in it. Orbison wasn't inspired by the goal, and only ever achieved one hit with the Sun label.

**C.** The value fit matters, says Cialdini, because innovation is, in part, a process of change, and under that pressure we, as a species, behave differently, 'When things change, we are hard-wired to play it safe.' Managers should therefore adopt an approach that appears counterintuitive -they should explain what stands to be lost if the company fails to seize a particular opportunity. Studies show that we invariably take more gambles when threatened with a loss than when offered a reward.

**D.** Authority doesn't have to inhibit innovation but it often does. The wrong kind of leadership will lead to what Cialdini calls "captainitis, the regrettable tendency of team members to opt out of team responsibilities that are properly their'. He calls it captainitis because, he says, "crew members of multipilot aircraft exhibit a sometimes deadly passivity when the flight

captain makes a clearly wrong-headed decision". This behaviour is not, he says, unique to air travel, but can happen in any workplace where the leader is overbearing.

At the other end of the scale is the 1980s Memphis design collective, a group of young designers for whom "the only rule was that there were no rule". This environment encouraged a free interchange of ideas, which led to more creativity with form, function, colour and materials that revolutionised attitudes to furniture design.

### Questions 31-35

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

Write the correct letter, **A-G**, in boxes **31-35** on your answer sheet

31. Employees whose values match those of their employers are more likely to

32. At times of change, people tend to

33. If people are aware of what they might lose, they will often

34. People working under a dominant boss are liable to

35. Employees working in organisations with few rules are more likely to

**A** take chances.

**B** share their ideas.

**C** become competitive.

**D** get promotion.

**E** avoid risk.

**F** ignore their duties.

**G** remain in their jobs.

### V13 - MATCHING HEADINGS

**Example 1.**

**Questions 1-7**

*Reading Passage 1 has seven paragraphs, A-G.*

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

*Write the correct number, i-ix, in boxes 1-7 on your answer sheet*

**List of Headings**

- i** The search for the reasons for an increase in population
- ii** Industrialisation and the fear of unemployment
- iii** The development of cities in Japan
- iv** The time and place of the Industrial Revolution
- v** The cases of Holland, France and China
- vi** Changes in drinking habits in Britain
- vii** Two keys to Britain's industrial revolution
- viii** Conditions required for industrialisation
- ix** Comparisons with Japan lead to the answer

- 1** Paragraph A
- 2** Paragraph B
- 3** Paragraph C
- 4** Paragraph D
- 5** Paragraph E
- 6** Paragraph F
- 7** Paragraph G

## TEA AND THE INDUSTRIAL REVOLUTION

*A Cambridge professor says that a change in drinking habits was the reason for the Industrial Revolution in Britain. Anjana Abuja reports*

### A

Alan Macfarlane, professor of anthropological science at King's College, Cambridge has, like other historians, spent decades wrestling with the enigma of the Industrial Revolution. Why did this particular Big Bang – the world-changing birth of industry-happen in Britain? And why did it strike at the end of the 18th century ?

### B

Macfarlane compares the puzzle to a combination lock. ' There are about 20 different factors and all of them need to be present before the revolution can happen , ' he says. For industry to take off, there needs to be the technology and power to drive factories, large urban populations to provide cheap labour, easy transport to move goods around, an affluent middle-class willing to buy mass-produced objects, a market-driven economy and a political system that allows this to happen. While this was the case for England, other nations, such as Japan, the Netherlands and France also met some of these criteria but were not industrialising. All these factors must have been necessary. But not sufficient to cause the revolution, says Macfarlane. 'After all, Holland had everything except coal while China also had many of these factors. Most historians are convinced there are one or two missing factors that you need to open the lock.'

### C

The missing factors, he proposes, are to be found in almost even kitchen cupboard. Tea and beer, two of the nation's favourite drinks, fuelled the revolution . The antiseptic properties of tannin, the active ingredient in tea, and of hops in beer – plus the fact that both are made with boiled water – allowed urban communities to flourish at close quarters without succumbing to water-borne diseases such as dysentery . The theory sounds eccentric but once he starts to explain the detective work that went into his deduction, the scepticism gives way to wary admiration. Macfarlanes case has been strengthened by support from notable quarters – Roy Porter, the distinguished medical historian, recently wrote a favourable appraisal of his research .

### D

Macfarlane had wondered for a long time how the Industrial Revolution came about. Historians had alighted on one interesting factor around the mid-18th century that required explanation. Between about 1650 and 1740, the population in Britain was static. But then there was a burst in population growth. Macfarlane says: 'The infant mortality rate halved in the space of 20 years, and this happened in both rural areas and cities, and across all classes. People suggested four possible causes. Was there a sudden change in the viruses and bacteria around? Unlikely. Was there a revolution in medical science? But this was a century before Lister's revolution\*. Was there a change in environmental conditions? There were improvements in agriculture that wiped out malaria, but these were small gains. Sanitation did not become widespread until the 19th century. The only option left is food. But the height and weight statistics show a decline. So the food must have got worse. Efforts to explain this sudden reduction in child deaths appeared to draw a blank.'

## E

This population burst seemed to happen at just the right time to provide labour for the Industrial Revolution. 'When you start moving towards an industrial revolution, it is economically efficient to have people living close together,' says Macfarlane. 'But then you get disease, particularly from human waste.' Some digging around in historical records revealed that there was a change in the incidence of water-borne disease at that time, especially dysentery. Macfarlane deduced that whatever the British were drinking must have been important in regulating disease. He says, 'We drank beer. For a long time, the English were protected by the strong antibacterial agent in hops, which were added to help preserve the beer. But in the late 17th century a tax was introduced on malt, the basic ingredient of beer. The poor turned to water and gin and in the 1720s the mortality rate began to rise again. Then it suddenly dropped again. What caused this?'

## F

Macfarlane looked to Japan, which was also developing large cities about the same time, and also had no sanitation. Water-borne diseases had a much looser grip on the Japanese population than those in Britain. Could it be the prevalence of tea in their culture? Macfarlane then noted that the history of tea in Britain provided an extraordinary coincidence of dates. Tea was relatively expensive until Britain started a direct dipper trade with China in the early 18th century. By the 1740s, about the time that infant mortality was dipping, the drink was

common. Macfarlane guessed that the fact that water had to be boiled, together with the stomach-purifying properties of tea meant that the breast milk provided by mothers was healthier than it had ever been. No other European nation sipped tea like the British, which, by Macfarlanes logic, pushed these other countries out of contention for the revolution.

## **G**

But, if tea is a factor in the combination lock, why didn't Japan forge ahead in a tea-soaked industrial revolution of its own? Macfarlane notes that even though 17th-century Japan had large cities, high literacy rates, even a futures market, it had turned its back on the essence of any work-based revolution by giving up labour-saving devices such as animals, afraid that they would put people out of work. So, the nation that we now think of as one of the most technologically advanced entered the 19th century having 'abandoned the wheel'.

**Example 2.****Questions 1-4**

*Reading Passage 1 has five paragraphs, A-E.*

*Choose the correct heading for paragraphs B-E from the list of headings below.*

*Write the correct number, i-vii, in boxes 1-4 on your answer sheet*

**List of Headings**

- i. Economic and social significance of tourism
- ii. The development of mass tourism
- iii. Travel for the wealthy
- iv. Earning foreign exchange through tourism
- v. Difficulty in recognising the economic effects of tourism
- vi. The contribution of air travel to tourism
- vii. The world impact of tourism
- viii. The history of travel

Example	Answer
Paragraph A	viii

**1** Paragraph B

**2** Paragraph C

**3** Paragraph D

**4** Paragraph E



---

## THE CONTEXT, MEANING AND SCOPE OF TOURISM

### A

Travel has existed since the beginning of time, when primitive man set out, often traversing great distances in search of game, which provided the food and clothing necessary for his survival. Throughout the course of history, people have travelled for purposes of trade, religious conviction, economic gain, war, migration and other equally compelling motivations. In the Roman era, wealthy aristocrats and high government officials also travelled for pleasure. Seaside resorts located at Pompeii and Herculaneum afforded citizens the opportunity to escape to their vacation villas in order to avoid the summer heat of Rome. Travel, except during the Dark Ages, has continued to grow and, throughout recorded history, has played a vital role in the development of civilisations and their economies.

### B

Tourism in the mass form as we know it today is a distinctly twentieth-century phenomenon. Historians suggest that the advent of mass tourism began in England during the industrial revolution with the rise of the middle class and the availability of relatively inexpensive transportation. The creation of the commercial airline industry following the Second World War and the subsequent development of the jet aircraft in the 1950s signalled the rapid growth and expansion of international travel. This growth led to the development of a major new industry: tourism. In turn, international tourism became the concern of a number of world governments since it not only provided new employment opportunities but also produced a means of earning foreign exchange.

### C

Tourism today has grown significantly in both economic and social importance. In most industrialised countries over the past few years the fastest growth has been seen in the area of services. One of the largest segments of the service industry, although largely unrecognised as an entity in some of these countries, is travel and tourism. According to the World Travel and Tourism Council (1992), travel and tourism is the largest industry in the world on virtually any economic measure including value-added capital investment, employment and tax contributions. In 1992 the industry's gross output was estimated to be \$3.5 trillion, over 12 per cent of all consumer spending. The travel and tourism industry is the world's largest employer the almost 130 million jobs, or almost 7 per cent of all employees.

This industry is the world's leading industrial contributor, producing over 6 per cent of the world's national product and accounting for capital investment in excess of \$422 billion in direct indirect and personal taxes each year. Thus, tourism has a profound impact both on the world economy and, because of the educative effect of travel and the effects on employment, on society itself.

## D

However, the major problems of the travel and tourism industry that have hidden, or obscured, its economic impact are the diversity and fragmentation of the industry itself. The travel industry includes: hotels, motels and other types of accommodation; restaurants and other food services; transportation services and facilities; amusements, attractions and other leisure facilities; gift shops and a large number of other enterprises. Since many of these businesses also serve local residents, the impact of spending by visitors can easily be overlooked or underestimated. In addition, Meis (1992) points out that the tourism industry involves concepts that have remained amorphous to both analysts and decision makers. Moreover, in all nations this problem has made it difficult for the industry to develop any type of reliable or credible tourism information base in order to estimate the contribution it makes to regional, national and global economies. However, the nature of this very diversity makes travel and tourism ideal vehicles for economic development in a wide variety of countries, regions or communities.

## E

Once the exclusive province of the wealthy, travel and tourism have become an institutionalised way of life for most of the population. In fact, McIntosh and Goeldner (1990) suggest that tourism has become the largest commodity in international trade for many nations and, for a significant number of other countries, it ranks second or third. For example, tourism is the major source of income in Bermuda, Greece, Italy, Spain, Switzerland and most Caribbean countries. In addition, Hawkins and Ritchie, quoting from data published by the American Express Company, suggest that the travel and tourism industry is the number one ranked employer in the Bahamas, Brazil, Canada, France, (the former) West Germany, Hong Kong, Italy, Jamaica, Japan, Singapore, the United Kingdom and the United States. However, because of problems of definition, which directly affect statistical measurement, it is not possible with any degree of certainty to provide precise, valid or reliable data about the extent

of world-wide tourism participation or its economic impact . In many cases, similar difficulties arise when attempts are made to measure domestic tourism .

**Example 3.****Questions 14-21**

*You should spend about 20 minutes on Questions 14-26, which are based on Reading Passage 2 on the following pages.*

*Reading Passage 2 has nine paragraphs, A-I.*

*Choose the correct heading for paragraphs A-E and G-I from the list of headings below.*

*Write the correct number i-xi, in boxes 14-21 on your answer sheet.*

**List of Headings**

- i** A fresh and important long-term goal
- ii** Charging for roads and improving other transport methods
- iii** Changes affecting the distances goods may be transported
- iv** Taking all the steps necessary to change transport patterns
- v** The environmental costs of road transport
- vi** The escalating cost of rail transport
- vii** The need to achieve transport rebalance
- viii** The rapid growth of private transport
- ix** Plans to develop major road networks
- x** Restricting road use through charging policies alone
- xi** Transport trends in countries awaiting EU admission

- 14** Paragraph A
- 15** Paragraph B
- 16** Paragraph C
- 17** Paragraph D
- 18** Paragraph E
- 19** Paragraph G
- 20** Paragraph H
- 21** Paragraph I

## EUROPEAN TRANSPORT SYSTEMS 1990-2010

*What have been the trends and what are the prospects for European transport systems?*

### A

It is difficult to conceive of vigorous economic growth without an efficient transport system. Although modern information technologies can reduce the demand for physical transport by facilitating teleworking and teleservices, the requirement for transport continues to increase. There are two key factors behind this trend. For passenger transport, the determining factor is the spectacular growth in car use. The number of cars on European Union (EU) roads saw an increase of three million cars each year from 1990 to 2010, and in the next decade the EU will see a further substantial increase in its fleet.

### B

As far as goods transport is concerned, growth is due to a large extent to changes in the European economy and its system of production. In the last 20 years, as internal frontiers have been abolished, the EU has moved from a "stock" economy to a "flow" economy. This phenomenon has been emphasised by the relocation of some industries, particularly those which are labour intensive, to reduce production costs, even though the production site is hundreds or even thousands of kilometres away from the final assembly plant or away from users.

### C

The strong economic growth expected in countries which are candidates for entry to the EU will also increase transport flows, in particular road haulage traffic. In 1998, some of these countries already exported more than twice their 1990 volumes and imported more than five times their 1990 volumes. And although many candidate countries inherited a transport system which encourages rail, the distribution between modes has tipped sharply in favour of road transport since the 1990s. Between 1990 and 1998, road haulage increased by 19.4%, while during the same period rail haulage decreased by 43.5%, although – and this could benefit the enlarged EU – it is still on average at a much higher level than in existing member states.

### D

However, a new imperative-sustainable development – offers an opportunity for adapting the EU's common transport policy. This objective, agreed by the Gothenburg European Council,

has to be achieved by integrating environmental considerations into Community policies, and shifting the balance between modes of transport lies at the heart of its strategy. The ambitious objective can only be fully achieved by 2020, but proposed measures are nonetheless a first essential step towards a sustainable transport system which will ideally be in place in 30 years" time, that is by 2040 .

## **E**

In 1998, energy consumption in the transport sector was to blame for 28% of emissions of CO<sub>2</sub>, the leading greenhouse gas . According to the latest estimates, if nothing is done to reverse the traffic growth trend, CO<sub>2</sub> emissions from transport can be expected to increase by around 50% to 1,113 billion tonnes by 2020, compared with the 739 billion tonnes recorded in 1990 . Once again, road transport is the main culprit since it alone accounts for 84% of the CO<sub>2</sub> emissions attributable to transport. Using alternative fuels and improving energy efficiency is thus both an ecological necessity and a technological challenge.

## **F**

At the same time greater efforts must be made to achieve a modal shift. Such a change cannot be achieved overnight, all the less so after over half a century of constant deterioration in favour of road. This has reached such a pitch that today rail freight services are facing marginalisation, with just 8% of market share, and with international goods trains struggling along at an average speed of 18km/h. Three possible options have emerged.

## **G**

The first approach would consist of focusing on road transport solely through pricing. This option would not be accompanied by complementary measures in the other modes of transport. In the short term it might curb the growth in road transport through the better loading ratio of goods vehicles and occupancy rates of passenger vehicles expected as a result of the increase in the price of transport. However, the lack of measures available to revitalise other modes of transport would make it impossible for more sustainable modes of transport to take up the baton.

## **H**

The second approach also concentrates on road transport pricing but is accompanied by measures to increase the efficiency of the other modes (better quality of services, logistics, technology) . However, this approach does not include investment in new infrastructure, nor

does it guarantee better regional cohesion. It could help to achieve greater uncoupling than the first approach, but road transport would keep the lion's share of the market and continue to concentrate on saturated arteries, despite being the most polluting of the modes. It is therefore not enough to guarantee the necessary shift of the balance.

I

The third approach, which is not new, comprises a series of measures ranging from pricing to revitalising alternative modes of transport and targeting investment in the trans-European network. This integrated approach would allow the market shares of the other modes to return to their 1998 levels and thus make a shift of balance . It is far more ambitious than it looks, bearing in mind the historical imbalance in favour of roads for the last fifty years, but would achieve a marked break in the link between road transport growth and economic growth, without placing restrictions on the mobility of people and goods.

---

## V14 - WHICH PARAGRAPH CONTAINS?

### Example 1

#### Early modern policing

**A)** The first centrally organised police force was created by the government of King Louis XIV in 1667 to police the city of Paris, then the largest city in Europe. The task of the police was defined as "ensuring the peace and quiet of the public and of private individuals, purging the city of what may cause disturbances, procuring abundance, and having each and everyone live according to their station and their duties". The word "police" was borrowed from French into the English language in the 18th century.

**B)** In 1797, Patrick Colquhoun, a Scottish merchant, was able to persuade the West Indies merchants who operated at the Pool of London on the River Thames, to establish a police force at the docks to prevent rampant theft that was causing annual estimated losses of £500,000 worth of cargo. The idea of a police, as it then existed in France, was considered as a potentially undesirable foreign import. However, Colquhoun used economic indicators to show that a police dedicated to crime prevention was "perfectly congenial to the principle of the British constitution".

**C)** With an initial investment of £4,200, the new trial force of the Thames River Police began with about 50 men charged with policing 33,000 workers in the river trades. The force was a success after its first year, and Colquhoun's men had "established their worth by saving £122,000 worth of cargo and by the rescuing of several lives". Word of this success spread quickly, and the government passed the Marine Police Bill on 28 July 1800, transforming it from a private to public police agency; now the oldest police force in the world.

(Adapted from wikipedia.com)

**Which paragraph contains the following information?**

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

1. positive news that led to a new government policy
2. the origin of an English word
3. people's reluctance to accept a foreign idea
4. a specific problem that needed to be solved



**Example 2.****GIFTED CHILDREN AND LEARNING**

**A** Internationally, ‘giftedness’ is most frequently determined by a score on a general intelligence test, known as an IQ test, which is above a chosen cutoff point, usually at around the top 2-5%. Children’s educational environment contributes to the IQ score and the way intelligence is used. For example, a very close positive relationship was found when children’s IQ scores were compared with their home educational provision ( Freeman , 2010). The higher the children’s IQ scores, especially over IQ 130, the better the quality of their educational backup, measured in terms of reported verbal interactions with parents, number of books and activities in their home etc. Because IQ tests are decidedly influenced by what the child has learned, they are to some extent measures of current achievement based on age-norms; that is, how well the children have learned to manipulate their knowledge and know-how within the terms of the test. The vocabulary aspect, for example, is dependent on having heard those words. But IQ tests can neither identify the processes of learning and thinking nor predict creativity.

**B** Excellence does not emerge without appropriate help. To reach an exceptionally high standard in any area very able children need the means to learn, which includes material to work with and focused challenging tuition -and the encouragement to follow their dream. There appears to be a qualitative difference in the way the intellectually highly able think, compared with more average-ability or older pupils, for whom external regulation by the teacher often compensates for lack of internal regulation . To be at their most effective in their self-regulation, all children can be helped to identify their own ways of learning – metacognition – which will include strategies of planning, monitoring, evaluation, and choice of what to learn. Emotional awareness is also part of metacognition, so children should be helped to be aware of their feelings around the area to be learned, feelings of curiosity or confidence, for example.

**C** High achievers have been found to use self-regulatory learning strategies more often and more effectively than lower achievers, and are better able to transfer these strategies to deal with unfamiliar tasks. This happens to such a high degree in some children that they appear

to be demonstrating talent in particular areas. Overviewing research on the thinking process of highly able children, ( Shore and Kanevsky, 1993) put the instructor's problem succinctly: ' If they [the gifted] merely think more quickly, then we need only teach more quickly. If they merely make fewer errors, then we can shorten the practice '. But of course, this is not entirely the case; adjustments have to be made in methods of learning and teaching, to take account of the many ways individuals think.

**D** Yet in order to learn by themselves, the gifted do need some support from their teachers. Conversely, teachers who have a tendency to 'overdirect' can diminish their gifted pupils' learning autonomy . Although ' spoon-feeding ' can produce extremely high examination results, these are not always followed by equally impressive life successes. Too much dependence on the teachers risks loss of autonomy and motivation to discover. However, when teachers o pupils to reflect on their own learning and thinking activities, they increase their pupils' self-regulation. For a young child, it may be just the simple question 'What have you learned today?' which helps them to recognise what they are doing. Given that a fundamental goal of education is to transfer the control of learning from teachers to pupils, improving pupils' learning to learn techniques should be a major outcome of the school experience, especially for the highly competent. There are quite a number of new methods which can help, such as child- initiated learning, ability-peer tutoring, etc. Such practices have been found to be particularly useful for bright children from deprived areas .

**E** But scientific progress is not all theoretical, knowledge is a so vital to outstanding performance: individuals who know a great deal about a specific domain will achieve at a higher level than those who do not ( Elshout , 1995) . Research with creative scientists by Simonton (1988) brought him to the conclusion that above a certain high level, characteristics such as independence seemed to contribute more to reaching the highest levels of expertise than intellectual skills, due to the great demands of effort and time needed for learning and practice. Creativity in all forms can be seen as expertise se mixed with a high level of motivation ( Weisberg , 1993).

**F** To sum up, learning is affected by emotions of both the individual and significant others. Positive emotions facilitate the creative aspects of learning and negative emotions inhibit it. Fear, for example, can limit the development of curiosity, which is a strong force in scientific advance, because it motivates problem-solving behaviour. In Boekaerts' (1991) review of emotion the learning of very high IQ and highly achieving children, she found emotional forces in harness. They were not only curious, but often had a strong desire to control their environment, improve their learning efficiency and increase their own learning resources.

### 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** a reference to the influence of the domestic background on the gifted child.

**15** reference to what can be lost if learners are given too much guidance.

**16** a reference to the damaging effects of anxiety.

**17** examples of classroom techniques which favour socially-disadvantaged children.

**Example 3.****AUTUMN LEAVES**

***Canadian writer Jay Ingram investigates the mystery of why leaves turn red in the fall***

**A** One of the most captivating natural events of the year in many areas throughout North America is the turning of the leaves in the fall. The colours are magnificent, but the question of exactly why some trees turn yellow or orange, and others red or purple, is something which has long puzzled scientists.

**B** Summer leaves are green because they are full of chlorophyll, the molecule that captures sunlight converts that energy into new building materials for the tree . As fall approaches in the northern hemisphere, the amount of solar energy available declines considerably. For many trees – evergreen conifers being an exception – the best strategy is to abandon photosynthesis\* until the spring. So rather than maintaining the now redundant leaves throughout the winter, the tree saves its precious resources and discards them . But before letting its leaves go, the tree dismantles their chlorophyll molecules and ships their valuable nitrogen back into the twigs. As chlorophyll is depleted, other colours that have been dominated by it throughout the summer begin to be revealed. This unmasking explains the autumn colours of yellow and orange, but not the brilliant reds and purples of trees such as the maple or sumac .

**C** The source of the red is widely known: it is created by anthocyanins, water-soluble plant pigments reflecting the red to blue range of the visible spectrum. They belong to a class of sugar-based chemical compounds also known as flavonoids. What's puzzling is that anthocyanins are actually newly minted, made in the leaves at the same time as the tree is preparing to drop them. But it is hard to make sense of the manufacture of anthocyanins – why should a tree bother making new chemicals in its leaves when it's already scrambling to withdraw and preserve the ones already there?

**D** Some theories about anthocyanins have argued that they might act as a chemical defence against attacks by insects or fungi, or that they might attract fruit-eating birds or increase a

leaves tolerance to freezing. However there are problems with each of these theories, including the fact that leaves are red for such a relatively short period that the expense of energy needed to manufacture the anthocyanins would outweigh any anti-fungal or anti-herbivore activity achieved.\* photosynthesis: the production of new material from sunlight, water and carbon dioxide.

**E** It has also been proposed that trees may produce vivid red colours to convince herbivorous insects that they are healthy and robust and would be easily able to mount chemical defences against infestation. If insects paid attention to such advertisements, they might be prompted to lay their eggs on a duller, and presumably less resistant host. The flaw in this theory lies in the lack of proof to support it. No one has as yet ascertained whether more robust trees sport the brightest leaves, or whether insects make choices according to colour intensity.

**F** Perhaps the most plausible suggestion as to why leaves would go to the trouble of making anthocyanins when they're busy packing up for the winter is the theory known as the 'light screen' hypothesis. It sounds paradoxical, because the idea behind this hypothesis is that the red pigment is made in autumn leaves to protect chlorophyll, the light-absorbing chemical, from too much light. Why does chlorophyll need protection when it is the natural world's supreme light absorber? Why protect chlorophyll at a time when the tree is breaking it down to salvage as much of it as possible?

**G** Chlorophyll, although exquisitely evolved to capture the energy of sunlight, can sometimes be overwhelmed by it, especially in situations of drought, low temperatures, or nutrient deficiency. Moreover, the problem of oversensitivity to light is even more acute in the fall, when the leaf is busy preparing for winter by dismantling its internal machinery. The energy absorbed by the chlorophyll molecules of the unstable autumn leaf is not immediately channelled into useful products and processes, as it would be in an intact summer leaf. The weakened fall leaf then becomes vulnerable to the highly destructive effects of the oxygen created by the excited chlorophyll molecules.

**H** Even if you had never suspected that this is what was going on when leaves turn red, there are clues out there . One is straightforward: on many trees, the leaves that are the reddest are those on the side of the tree which gets most sun . Not only that, but the red is brighter on the upper side of the leaf. It has also been recognised for decades that the best conditions for intense red colours are dry , sunny days and cool nights, conditions that nicely match those that make leaves susceptible to excess light. And finally, trees such as maples usually get much redder the more north you travel in the northern hemisphere. It's colder there, they're more stressed, their chlorophyll is more sensitive and it needs more sunblock.

**I** What is still not fully understood, however, is why some trees resort to producing red pigments while others don't bother, and simply reveal their orange or yellow hues. Do these trees have other means at their disposal to prevent overexposure to light in autumn? Their story, though not as spectacular to the eye, will surely turn out to be as subtle and as complex.

### Questions 14-18

*Reading Passage 2 has nine paragraphs, A-I.*

*Which paragraph contains the following information?*

*Write the correct letter, A-I, in boxes 14-18 on your answer sheet.*

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

**14** a description of the substance responsible for the red colouration of leaves

**15** the reason why trees drop their leaves in autumn

**16** some evidence to confirm a theory about the purpose of the red leaves

**17** an explanation of the function of chlorophyll

**18** a suggestion that the red colouration in leaves could serve as a warning signal

---

## V15 - MULTIPLE CHOICE

### Example 1.

**A.** Physicist Richard Feynman returned over and over to an idea that drove his groundbreaking discoveries. His approach was documented by his Caltech colleague David Goodstein in the book Feynman's Lost Lecture about physics classes Feynman taught in the 1960s:

Once, I said to him, "Dick, explain to me, so that I can understand it, why spin one-half particles obey Fermi-Dirac statistics." Sizing up his audience perfectly, Feynman said, "I'll prepare a freshman lecture on it." But he came back a few days later to say, "I couldn't do it. I couldn't reduce it to the freshman level. That means we don't really understand it."

**B.** Feynman didn't mean all human knowledge must be distilled into an introductory college course. His point was that we need to build our grasp of science and technology from the ground up if we are to master it, not to mention reimagine how it works. Feynman was famous as a student for redoing many of physics' early experiments himself to build a foundational understanding of the field. By mastering these first principles, Feynman often saw things that others did not in quantum mechanics, computing, and nuclear physics, earning him the Nobel Prize in 1965.

### 1. When asked to explain a difficult concept, physicist Richard Feynman

- A immediately replied that he could not
- B replied that he had already prepared a lecture on it
- C said that he did not understand the concept either
- D promised to give his answer in an introductory lesson

### 2. Feynman believed that

- A scientists should master basic scientific principles first
- B early physics experiments need to be redone
- C most science students do not have a good foundation in physics
- D his knowledge of first principles earned him a Nobel Prize

**Example 2.****MUSEUM OF FINE ART AND THEIR PUBLIC**

**A.** One limitation is related to the way the museum presents its exhibits. As repositories of unique historical objects, art museums are often called ‘treasure houses’. We are reminded of this even before we view a collection by the presence of security guards, attendants, ropes and display cases to keep us away from the exhibits. In many cases, the architectural style of the building further reinforces that notion. In addition, a major collection like that of London’s National Gallery is housed in numerous rooms, each with dozens of works, any one of which is likely to be worth more than all the average visitor possesses. In a society that judges the personal status of the individual so much by their material worth, it is therefore difficult not to be impressed by one’s own relative ‘worthlessness’ in such an environment.

**B.** Furthermore, consideration of the ‘value’ of the original work in its treasure house setting impresses upon the viewer that, since these works were originally produced, they have been assigned a huge monetary value by some person or institution more powerful than themselves. Evidently, nothing the viewer thinks about the work is going to alter that value, and so today’s viewer is deterred from trying to extend that spontaneous, immediate, self-reliant kind of reading which would originally have met the work .

**C.** The visitor may then be struck by the strangeness of seeing such diverse paintings, drawings and sculptures brought together in an environment for which they were not originally created. This ‘displacement effect’ is further heightened by the sheer volume of exhibits . In the case of a major collection, there are probably more works on display than we could realistically view in weeks or even months.

**D.** This is particularly distressing because time seems to be a vital factor in the appreciation of all art forms. A fundamental difference between paintings and other art forms is that there is no prescribed time over which a painting is viewed . By contrast, the audience encourage an opera or a play over a specific time, which is the duration of the performance. Similarly novels and poems are read in a prescribed temporal sequence, whereas a picture has no clear place



at which to start viewing, or at which to finish. Thus art works themselves encourage us to view them superficially, without appreciating the richness of detail and labour that is involved.

### Questions 32-35

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

Write the correct letter in boxes **32—35** on your answer sheet

**32. The writer mentions London's National Gallery to illustrate**

- A** the undesirable cost to a nation of maintaining a huge collection of art.
- B** the conflict that may arise in society between financial and artistic values.
- C** the negative effect a museum can have on visitors' opinions of themselves.
- D** the need to put individual well-being above large-scale artistic schemes.

**33. The writer says that today, viewers may be unwilling to criticise because**

- A** they lack the knowledge needed to support an opinion.
- B** they fear it may have financial implications.
- C** they have no real concept of the work's value.
- D** they feel their personal reaction is of no significance.

**34. According to the writer, the 'displacement effect' on the visitor is caused by**

- A** the variety of works on display and the way they are arranged.
- B** the impossibility of viewing particular works of art over a long period.
- C** the similar nature of the paintings and the lack of great works.
- D** the inappropriate nature of the individual works selected for exhibition.

**35. The writer says that unlike other forms of art, a painting does not**

- A** involve direct contact with an audience.
- B** require a specific location for a performance.
- C** need the involvement of other professionals.
- D** have a specific beginning or end.

**Example 3.****BEYOND THE BLUE HORIZON*****Ancient voyagers who settled the far-flung islands of the Pacific Ocean***

**A.** There is one stubborn question for which archaeology has yet to provide any answers: how did the Lapita accomplish the ancient equivalent of a moon landing, many times over? No-one has found one of their canoes or any rigging, which could reveal how the canoes were sailed. Nor do the oral histories and traditions of later Polynesians offer any insights, for they turn into myths long before they reach as far back in time as the Lapita .

**B.** ‘All we can say for certain is that the Lapita had canoes that were capable of ocean voyages, and they had the ability to sail them,’ says Geoff Irwin, a professor of archaeology at the University of Auckland. Those sailing skills, he says, were developed and passed down over thousands of years by earlier mariners who worked their way through the archipelagoes of the western Pacific, making short crossings to nearby islands. The real adventure didn’t begin, however, until their Lapita descendants sailed out of sight of land, with empty horizons on every side. This must have been as difficult for them as landing on the moon is for us today. Certainly it distinguished them from their ancestors, but what gave them the courage to launch out on such risky voyages?

**C.** The Lap it as thrust into the Pacific was eastward, against the prevailing trade winds, Irwin notes. Those nagging headwinds, he argues, may have been the key to their success. ‘They could sail out for days into the unknown and assess the area, secure in the knowledge that if they didn’t find anything, they could turn about and catch a swift ride back on the trade winds. This is what would have made the whole thing work .’ Once out there, skilled seafarers would have detected abundant leads to follow to land: seabirds, coconuts and twigs carried out to sea by the tides, and the afternoon pile-up of clouds on the horizon which often indicates an island in the distance.

**D.** For returning explorers, successful or not, the geography of their own archipelagoes would have provided a safety net . Without this to go by, overshooting their home ports, getting lost

and sailing off into eternity would have been all too easy. Vanuatu, for example, stretches more than 500 miles in a northwest-southeast trend, its scores of innumerable islands forming a backstop for mariners riding the trade winds home.

### Questions 32-35

#### Multiple Choice Question

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

Write the correct letter in boxes **32-35** on your answer sheet.

**32 According to the writer, there are difficulties explaining how the Lapita accomplished their journeys because**

- A** the canoes that have been discovered offer relatively few clues.
- B** archaeologists have shown limited interest in this area of research.
- C** little information relating to this period can be relied upon for accuracy.
- D** technological advances have altered the way such achievements are viewed.

**33 According to the second paragraph, what was extraordinary about the Lapita?**

- A** They sailed beyond the point where land was visible.
- B** Their cultural heritage discouraged the expression of fear.
- C** They were able to build canoes that withstood ocean voyages.
- D** Their navigational skills were passed on from one generation to the next.

**34 What does 'This' refer to in the third paragraph?**

- A** the Lapita's seafaring talent
- B** the Lapita's ability to detect signs of land
- C** the Lapita's extensive knowledge of the region
- D** the Lapita's belief they would be able to return home

**35 According to the fourth paragraph, how was the geography of the region significant?**

- A** It played an important role in Lapita culture.

- B** It meant there were relatively few storms at sea.
- C** It provided a navigational aid for the Lapita.
- D** It made a large number of islands habitable.