

SPEAK, SCORE, SUCCEED

READING

(ACADEMIC)

ACTUAL TEST WITH ANSWERS

LATEST EDITION



Table of Content

PREFACE

IELTS General Reading Actual **Test 1**Reading Passage 1
Reading Passage 2
Reading Passage 3

IELTS General Reading Actual **Test 2** Reading Passage 1 Reading Passage 2

Reading Passage 3

IELTS General Reading Actual Test 3

Reading Passage 1 Reading Passage 2 Reading Passage 3

IELTS General Reading Actual Test 4

Reading Passage 1 Reading Passage 2 Reading Passage 3

IELTS General Reading Actual Test 5

Reading Passage 1 Reading Passage 2 Reading Passage 3

ANSWERS

Test 1

Test 2

Test 3

Test 4

Test 5

Reading Test 1

SECTION 1

You should spend about 20 minutes on Questions 1-13 which are based on Reading Passage 1

How to Spot a liar

Α.

However much we may abhor it, deception comes naturally to all living things. Birds do it by feigning injury to lead hungry predators away from nesting young. Spider crabs do it by disguise: adorning themselves with strips of kelp and other debris, they pretend to be something they are not – and so escape their enemies. Nature amply rewards successful deceivers by allowing them to survive long enough to mate and reproduce. So it may come as no surprise to learn that human beings- who, according to psychologist Gerald Johnson of the University of South California, or lied to about 200 times a day, roughly one untruth every 5 minutes- often deceive for exactly the same reasons: to save their own skins or to get something they can't get by other means.

В.

But knowing how to catch deceit can be just as important a survival skill as knowing how to tell a lie and get away with it. A person able to spot falsehood quickly is unlikely to be swindled by an unscrupulous business associate or hoodwinked by a devious spouse. Luckily, nature provides more than enough clues to trap dissemblers in their own tangled webs- if you know where to look. By closely observing facial expressions, body language and tone of voice, practically anyone can recognise the tell-tale signs of lying. Researchers are even programming computers – like those used on Lie Detector -to get at the truth by analysing the same physical cues available to the naked eye and ear. "With the proper training, many people can learn to reliably detect lies," says Paul Ekman, professor of psychology at the University of California, San Francisco, who has spent the past 15 years studying the secret art of deception.

C.

In order to know what kind of Lies work best, successful liars need to accurately assess other people's emotional states. Ackman's research shows that this same emotional intelligence is essential for good lie detectors, too. The emotional state to watch out for is stress, the conflict most liars feel between the truth and what they actually say and do.

D.

Even high-tech lie detectors don't detect lies as such; they merely detect the physical cues of emotions, which may or may not correspond to what the person being tested is saying. Polygraphs, for instance, measure respiration, heart rate and skin conductivity, which tend to increase when people are nervous – as they usually are when lying.

E.

Nervous people typically perspire, and the salts contained in perspiration conducts electricity. That's why sudden leap in skin conductivity indicates nervousness -about getting caught, perhaps -which makes, in turn, suggest that someone is being economical with the truth. On the other hand, it might also mean that the lights in the television Studio are too hot- which is one reason polygraph tests are inadmissible in court. "Good lie detectors don't rely on a single thing" says Ekma ,but interpret clusters of verbal and non-verbal clues that suggest someone might be lying."

F.

The clues are written all over the face. Because the musculature of the face is directly connected to the areas of the brain that processes emotion, the countenance can be a window to the soul. Neurological studies even suggest that genuine emotions travel different pathways through the brain than insincere ones. If a patient paralyzed by stroke on one side of the face, for example, is asked to smile deliberately, only the mobile side of the mouth is raised. But tell that same person a funny joke, and the patient breaks into a full and spontaneous smile. Very few people -most notably, actors and politicians- are able to consciously control all of their facial expressions. Lies can often be caught when the liars true feelings briefly leak through the mask of deception. We don't think before we feel, Ekman says. "Expressions tend to show up on the face before we're even conscious of experiencing an emotion."

G.

One of the most difficult facial expressions to fake- or conceal, if it's genuinely felt - is sadness. When someone is truly sad, the forehead wrinkles with grief and the inner corners of the eyebrows are pulled up. Fewer than 15% of the people Ekman tested were able to produce this eyebrow movement voluntarily. By contrast, the lowering of the eyebrows associated with an angry scowl can be replicated at will but almost everybody. "If someone claims they are sad and the inner corners of their eyebrows don't go up, Ekmam says, the sadness is probably false."

Н.

The smile, on the other hand, is one of the easiest facial expressions to counterfeit. It takes just two muscles -the zygomaticus major muscles that extend from the cheekbones to the corners of the lips- to produce a grin. But there's a catch. A genuine smile affects not only the corners of the lips but also the orbicularis oculi, the muscle around the eye that produces the distinctive "crow's feet" associated with people who laugh a lot. A counterfeit grin can be unmasked if the corners of the lips go up, the eyes crinkle, but the inner corners of the eyebrows are not lowered, a movement controlled by the orbicularis oculi that is difficult to fake. The absence of lowered eyebrows is one reason why the smile looks so strained and stiff.

Questions 1-5

Do the following statements agree with the claims of the writer in Reading Passage? In boxes 1-5 on your answer sheet, write

YES - if the statement agrees with the information

NO - if the statement contradicts the information

NOT GIVEN - if there is no information on this

- 1. All living animals can lie.
- 2. Some people tell lies for self-preservation.
- 3. Scientists have used computers to analyze which part of the brain is responsible for telling lies.
- 4. Lying as a survival skill is more important than detecting a lie.
- 5. To be a good liar, one has to understand other people's emotions.

Questions 6-9

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

Write your answers in boxes 6-9.

- 6. How does the lie detector work?
- A It detects whether one's emotional state is stable.
- B It detects one's brain activity level.
- C It detects body behavior during one's verbal response.
- D It analyses one's verbal response word by word.
- 7. Lie detectors can't be used as evidence in a court of law because
- A Lights often cause lie detectors to malfunction.
- B They are based on too many verbal and non-verbal clues.
- C Polygraph tests are often inaccurate.
- D There may be many causes of certain body behavior.
- 8. Why does the author mention the paralyzed patients?
- A To demonstrate how a paralyzed patient smiles
- B To show the relation between true emotions and body behavior
- C To examine how they were paralyzed
- D To show the importance of happiness from recovery

- 9. The author uses politicians to exemplify that they can
- A Have emotions.
- B Imitate actors.
- C Detect other people's lives.
- D Mask their true feelings.

Questions 10-13

Classify the following facial traits as referring to

A sadness

B anger

C happiness

Write the correct letter A, B or C in boxes 10-13.

- 10. Inner corners of eyebrows raised
- 11. The whole eyebrows lowered
- 12. Lines formed around
- 13. Lines form above eyebrows

SECTION 2

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

The Study of Chimpanzee Culture

A.

After studying the similarities between chimpanzees and humans for years, researchers have recognised these resemblances run much deeper than anyone first thought in the latest decade. For instance, the nut cracking observed in the Tai Forest is not a simple chimpanzee behaviour, but a separate adaptation found only in that particular part of Africa, as well as a trait which is considered to be an expression of chimpanzee culture by biologists. These researchers frequently quote the word 'culture' to describe elementary animal behaviours, like the regional dialects of different species of songbirds, but it turns out that the rich and varied cultural traditions chimpanzees enjoyed rank secondly in complexity only to human traditions.

В.

During the past two years, the major research group which studies chimpanzees collaborated unprecedentedly and documented some distinct cultural patterns, ranging from animals' use of tools to their forms of communication and social customs. This emerging picture of chimpanzees affects how human beings ponder upon these amazing creatures. Also, it alters our conception of human uniqueness and shows us the extraordinary ability of our ancient ancestors to create cultures.

C.

Although we know that Homo sapiens and Pan Troglodytes have coexisted for hundreds of millennia and their genetic similarities surpass 98 per cent, we still knew next to nothing about chimpanzee behaviour in the wild until 40 years ago. All this began to change in the 1960s when Toshisada Nishida of Kyoto University in Japan and renowned British primatologist Jane Goodall launched their studies of wild chimpanzees at two field sites in Tanzania. (Goodall's research station at Gombe—the first of its kind—is more famous, but Nishida's site at Mahale is the second oldest chimpanzee research site in the world.)

D.

During these primary studies, as the chimpanzees became more and more accustomed to close observation, the remarkable discoveries emerged. Researchers witnessed a variety of unexpected behaviours, ranging from fashioning and using tools, hunting, meat eating, food sharing to lethal fights between members of neighbouring communities.

E.

In 1973, 13 forms of tool use and 8 social activities which appeared to differ between the Gombe chimpanzees and chimpanzee species elsewhere were recorded by Goodall. She speculated that some variations shared what she referred to as a 'cultural origin'. But

what exactly did Goodall mean by 'culture'? According to the Oxford Encyclopedic English Dictionary, culture is defined as 'the customs. . .and achievements of a particular time or people.' The diversity of human cultures extends from technological variations to marriage rituals, from culinary habits to myths and legends. Of course, animals do not have myths and legends, but they do share the capacity to pass on behavioural traits from one generation to another, not through their genes but via learning. From biologists' view, this is the fundamental criterion for a cultural trait—something can be learnt by observing the established skills of others and then passed on to following generations.

F.

What are the implications for chimpanzees themselves? We must place a high value upon the tragic loss of chimpanzees, who are decimated just when finally we are coming to appreciate these astonishing animals more completely. The population of chimpanzees has plummeted and continued to fall due to illegal trapping, logging and, most recently, the bushmeat trade within the past century. The latter is particularly alarming because logging has driven roadways, which are now used to ship wild animal meat—including chimpanzee meat to consumers as far afield as Europe, into forests. Such destruction threatens not only the animals themselves but also a host of fascinatingly different ape Cultures.

G.

However, the cultural richness of the ape may contribute to its salvation. For example, the conservation efforts have already altered the attitudes of some local people. After several organisations showed videotapes illustrating the cognitive prowess of chimpanzees, one Zairian viewer was heard to exclaim, 'Ah, this ape is so like me, I can no longer eat him.'

Н.

How did an international team of chimpanzee experts perform the most comprehensive survey of the animals ever attempted? Although scientists have been delving into chimpanzee culture for several decades, sometimes their studies contained a fatal defect. So far, most attempts to document cultural diversity among chimpanzees have solely relied upon officially published accounts of the behaviours reported at each research site. But this approach probably neglects a good deal of cultural variation for three reasons.

I.

First, scientists normally don't publish an extensive list of all the activities they do not see at a particular location. Yet this is the very information we need to know—which behaviours were and were not observed at each site. Second, there are many reports describing chimpanzee behaviours without expressing how common they are; without this information, we can't determine whether a particular action was a transient phenomenon or a routine event that should be considered part of its culture. Finally, researchers' description of potentially significant chimpanzee behaviours often lacks sufficient detail,

which makes it difficult for scientists from other spots to report the presence or absence of the activities.

J.

To tackle these problems, my colleague and I determined to take a new approach. We asked field researchers at each site to list all the behaviours which they suspected were local traditions. With this information, we assembled a comprehensive list of 65 candidates for cultural behaviours.

K.

Then we distributed our list to team leaders at each site. They consulted with their colleagues and classified each behaviour regarding its occurrence or absence in the chimpanzee community. The major brackets contained customary behaviour (occurs in most or all of the able-bodied members of at least one age or sex class, such as all adult males), habitual (less common than customary but occurs repeatedly in several individuals), present (observed at the site but not habitual), absent (never seen), and Unknown.

Questions 14-18

Reading Passage 2 has eleven paragraphs, A-K.
Which paragraph contains the following information?
Write the correct letter, A-K, in boxes 14-18 on your answer sheet.

- 14. an approach to research on chimpanzees culture that is only based on official sources
- 15. mention of a new system designed by two scientists who aim to solve the problem
- 16. reasons why previous research on ape culture is problematic
- 17. new classification of data observed or collected
- 18. an example showing that the tragic outcome of animals leads to an indication of a change in local people's attitude in the preservation

Questions 19-23

Do the following statements agree with the information given in Reading Passage 2? In boxes 19-23 on your answer sheet, write

TRUE if the statement is true

FALSE if the statement is false

NOT GIVEN if the information is not given in the passage

- 19. The research found that scientists can make chimpanzees possess the same complex culture as human beings.
- 20. Humans and apes lived together long time ago and shared most of their genetic substance.
- 21. Even Toshisada Nishida and Jane Goodall's beginning studies observed many surprising features of civilised behaviours among chimpanzees.

- 22. Chimpanzees, like humans, have the ability to deliver cultural behaviours mostly from genetic inheritance.
- 23. For decades, researchers have investigated chimpanzees by data obtained from both unobserved and observed approaches.

Questions 24-27

Answer the questions below.

Choose NO MORE THAN TWO WORDS AND/OR A NUMBER from the passage for each answer. Write your answers in boxes 24-27 on your answer sheet.

When did the unexpected discoveries of chimpanzee behaviour start?

24				
Which country is the resea	arching site of Tos	shisada Nishida	a and Jane Goodall?	
What did the chimpanzee 26	have to get used	to in the initial	study?	
What term can be used to regions used the different 27		Goodall found	the chimpanzees in diffe	rent

SECTION 3

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

Section A

Shoes—we wear them nearly every day. We walk, run, jump, climb, and stand in them for hours on end. Yet we hardly think about them because they are such an ordinary part of our daily lives. Shoes were not always an important part of people's wardrobes.

The ancient Greeks, Egyptians, and Persians made and wore sandals, but actually went barefoot most of the time. These people lived in regions where the weather was temperate, and shoes were not needed to keep their feet warm. Archaeologists have found shoes in the ruins of these civilizations, but they seem to have been worn mainly by royalty, who could afford to employ tailors and shoemakers.

Section B

As shoes became more common in ancient Egypt, the first ones were simple sandals created mainly to protect the soles of the feet from rough surfaces. The easiest way to make shoes in these ancient times was to use materials that were readily available, including tree bark, leaves, and grasses. In ancient Egypt, sandals were made of rushes, which are grassy plants with hollow stalks. Rushes are the same plants used today to make chair bottoms, mats, and baskets.

Among the ancient Greeks, sandals were woven of similar plant materials, but the Greeks also varied the process by tying small pieces of wood together with dried grass. In later years, they made sandals with leather from the hides of animals. The first Greek shoes were purely functional, but over time most were dyed and decorated to make fashion statements. Women began to wear soft, enclosed leather shoes, and these grew increasingly fancy in the later years of the Greek civilization.

The Romans wore sandals much like the Greeks did, but used more pieces of leather to make them. Some Roman sandals had straps that wrapped around the ankles. Shoemakers often dyed these sandals in bright colors that represented the different jobs held by the people wearing them. The patricians, or privileged classes, wore red sandals with moon-shaped ornaments on the back. Senators wore brown shoes with four black leather straps wound around the lower leg. Consuls, or legal officers, wore white shoes, and soldiers wore heavy leather sandals that were more like boots—but with bare toes!

Meanwhile, people who lived in cold northern climates were making their shoes from the hides of furry animals, such as polar bears and yaks. The soles and tops of these shoes were made from pieces of soft leather sewn together. This type of shoe—whether or not it used fur—was called a moccasin. Some Native American groups made and wore moccasins for thousands of years. Some moccasins were plain, and others were adorned with beadwork.

Section C

As the centuries passed, the primary material for shoes continued to be leather, and the process of making shoes did not change quickly. A wood and metal framework called a "last" was wrapped with pieces of leather that were then sewn together. As late as the mid-1800s, lasts were straight on both sides; this meant that there was no difference in shape between left and right shoes. It also meant that shoes were uncomfortable and that breaking them in was not easy. The lasts were made in different sizes, but for a long time only two widths were available—thin and stout.

For centuries, shoes were sewn by hand, just as they had been by the ancient Egyptians. Machines to assist shoemakers were not used until the rolling machine was invented in 1845. This device was used to pound pieces of leather into thin strips. About the same time, Elias Howe invented the sewing machine, and pieces of shoe leather could now be sewn together more quickly. Another inventor, Lyman Reed Blake, created a machine for sewing the soles of shoes to the upper parts. Because shoes could be made faster and more cheaply, people who had never owned shoes before could now afford to buy and wear them.

Section D

In Europe and North America during the seventeenth century, most people wore boots because they were practical. Even in many large cities, dirt roads were common, and people had to walk along muddy pathways and across streams. By the eighteenth century, however, more city streets were paved with cobblestones, and it was easier to keep shoes clean. Shoes became more decorative, and fancy buckles of gold and silver were often used. Most shoes worn in the United States throughout the nineteenth century were patterned after European styles.

The major change in shoes over the last century has been the use of materials other than leather. Humphrey O'Sullivan invented the first rubber heel for shoes in 1898. Rubber heels were popular because they lasted much longer than heels made of leather. The use of rubber soles came next. The first rubbersoled shoes were called plimsolls, and they were manufactured in the United States in the late 1800s.

The first American shoes made without leather were invented in 1917. The upper material was made of a flexible canvas. Those were the original "sneakers," a word that was used because the rubber sole made the shoe very quiet, unlike most leather shoes, which often squeaked when people walked.

Many people today choose athletic shoes for casual wear, but not until the late 1970s were shoes designed with amateur athletes in mind. Shoes made of rubber and canvas were worn by tennis, volleyball, and basketball players. By the 1980s, companies began to design athletic shoes for specific sports, helping athletes perform better while protecting their feet and providing comfort.

Shoes have come a long way since the ancient Egyptians created their first sandals.

Many more types of materials are used, and shoes have never been more comfortable or supportive for feet. Even so, it is interesting that the basic sandal, crafted by people more than four thousand years ago, still has many similarities to shoes we wear today.

Questions 28 - 31

Look at the sections A-D. For which sections are the following headings true? Choose the correct number.

- 28. SECTION A
- 29. SECTION B
- 30. SECTION C
- 31. SECTION D
- 1. Shoes have come a long way
- 2. The first American shoes
- 3. New Trends, Materials, and Designs
- 4. The leather shoes
- 5. Shoes in Early Civilizations
- 6. Shoes for royalty
- 7. From Sandals to Sneakers Shoes Step Forward
- 8. The Shoemaking Process

Questions 32 - 36 Choose the correct answer.

- 32. What was the purpose of the first shoe?
- a) Comfortable
- b) Fashionable
- c) Functional
- d) Popularity
- 33. Which event happened first in the history of shoes?
- a) the making and wearing of moccasins
- b) the making and wearing of sandals
- c) the making and wearing of boots
- d) the making and wearing of sneakers
- 34. Which civilization was the first to wear shoes to make a fashion statement?
- a) Greek
- b) Roman
- c) Egyptian
- d) Persian
- 35. The First American shoes were made of which material

- a) leather
- b) flexible canvas
- c) grass
- d) animal hide
- 36. What is the author's purpose in writing the passage?
- a) to inform about the first sneaker
- b) to inform about the history of moccasins
- c) to inform about ancient Greeks
- d) to inform about the history of shoes

Questions 37 - 40

Complete the sentences by using one or three words and/	or a number.
The first American Shoes were 37	
During 17th century, Europeans and North American mostl	y wore 38
The word sneaker is used because the rubber sole shoes a	are 39
In 1980s, companies made personalized 40.	_ shoes.

Reading Test 2

SECTION 1

You should spend about 20 minutes on Questions 1-13 which are based on Reading Passage 1

Man or Machine

Α

During July 2003, the Museum of Science in Cambridge, Massachusetts exhibited what Honda calls 'the world's most advanced humanoid robot', ASIMO (the Advanced Step in Innovative Mobility). Honda's brainchild is on tour in North America and delighting audiences wherever it goes. After 17 years in the making, ASIMO stands at four feet tall, weighs around 115 pounds and looks like a child in an astronaut's suit.

Though it is difficult to see ASIMO's face at a distance, on closer inspection it has a smile and two large 'eyes' that conceal cameras. The robot cannot work autonomously – its actions are 'remote-controlled' by scientist through the computer in its backpack. Yet watching AIMIO perform at a show in Massachusetts it seemed uncannily human. The audience cheered as ASIMO walked forwards and backwards, side to side and up and downstairs. After the show, a number of people told me that they would like robots to play more of a role in daily life – one even said that the robot would be like 'another person'.

В

While the Japanese have made huge strides in solving some of the engineering problems of human kinetics and bipedal movements, for the past 10 years scientists at MIT's former Artificial Intelligence (AI) lab (recently renamed the Computer Science and Artificial Intelligence Laboratory, CSAIL) have been making robots that can behave like humans and interact with humans. One of MIT's robots, Kismet, is an anthropomorphic head and has two eyes (complete with eyelids), ears, a mouth, and eyebrows.

It has several facial expressions, including happy, sad, frightened and disgusted. Human interlocutors areable to read some of the robot's facial expressions, and often change their behavior towards the machine as a result – for example, playing with it when it appears 'sad'. Kismet is now in MIT's museum, but the ideas developed here continue to be explored in new robots.

C

Cog (short for Cognition) is another pioneering project from MIT's former AI lab. Cog has a head, eyes, two arms, hands and a torso – and its proportions were originally measured from the body of a researcher in the lab. The work on Cog has been used to test theories of embodiment and developmental robotics, particularly getting a robot to develop intelligence by responding to its environment via sensors, and to learn through these

types of interactions.

D

MIT is getting furthest down the road to creating human-like and interactive robots. Some scientists argue that ASIMO is a great engineering feat but not an intelligent machine – because it is unable to interact autonomously with unpredictabilities in its environment in meaningful ways, and learn from experience. Robots like Cog and Kismet and new robots at MIT's CSAIL and media lab, however, are beginning to do this.

Ε

These are exciting developments. Creating a machine that can walk, make gestures and learn from its environment is an amazing achievement. And watch this space: these achievements are likely rapidly to be improved upon. Humanoid robots could have a plethora of uses in society, helping to free people from everyday tasks. In Japan, for example, there is an aim to create robots that can do the tasks similar to an average human and also act in more sophisticated situations as firefighters, astronauts or medical assistants to the elderly in the workplace and in homes – partly in order to counterbalance the effects of an ageing population.

F

Such robots say much about the way in which we view humanity, and they bring out the best and worst of us. On one hand, these developments express human creativity – our ability to invent, experiment, and to extend our control over the world. On the other hand, the aim to create a robot like a human being is spurred on by dehumanized ideas – by the sense that human companionship can be substituted by machines; that humans lose their humanity when they interact with technology; or that we a little more than surface and ritual behaviors, that can be simulated with metal and electrical circuits.

Questions 1-6

Reading passage 1 has six paragraphs, A-F.
Which paragraph contains the following information?
Write the correct letter, A-F, in boxes 1-6 on your answer sheet.
NB You may use any letter more than once

- 1. different ways of using robots
- 2. a robot whose body has the same proportion as that of an adult
- 3. the fact that human can be copied and replaced by robots
- 4. a comparison between ASIMO for Honda and other robots
- 5. the pros and cons of creating robots
- 6. a robot that has eyebrows

Questions 7-13

Complete the following summary of the paragraphs of Reading Passage 1.
Using NO MORE THAN TWO WORDS from the Reading Passage for each answer.
Write your answers in boxes 7-13 on your answer sheet.



SECTION 2

You should spend about 20 minutes on Questions 14-26 which are based on Reading Passage 2

How to Reduce Employee Turnover

A.

The chief executive of a large hotel became aware that his company was experiencing an annual employee turnover of about 60 per cent, at an annual cost estimated between \$10 to \$15 million. This large amount of money was calculated based on three factors: the money spent hiring and training replacements; the cost to the business in lower productivity due to employees becoming familiar with the requirements of their new job; and reduced occupancy rates, due to poor guest satisfaction levels.

B.

The Chief Executive knew that in order to save his company, he had to reduce the high turnover costs. Making up for the lost income due to turnover is not an easy task and many companies have not declared war on unwanted employee turnover because they have not taken the time to work out the costs of lost revenues and productivity. But the hotel boss decided to tackle the issue head-on by implementing a 4 point plan, the hotel first took the time to calculate their turnover costs; secondly to evaluate the main causes for the staff turnover and; thirdly to discuss some of the solutions to the problems and lastly to prioritize actions and evaluate future returns following implemented changes.

C.

Within a two-year period, the results were significant. The annual employee turnover was reduced by 78 per cent and this impacted downtime due to training and guest satisfaction. The result was a \$10 million savings for the company. Because most do not know the root causes of employee turnover and costs have often not been accurately estimated, causes are usually not known. As a result, solutions are commonly not targeted at a company's individual, specific causes. The following is an examination of what the Chief Executive did to turn the hotel around.

D.

Two factors were considered in relation to the calculation of costs: those departments who had the highest rates of turnover and those whose turnover had the greatest potential effect on profit. After some investigation, it was shown that some of the positions with the highest turnover rates such as cleaners and gardeners did not carry with them high associated costs. In fact, what was revealed was that only 6 per cent of employees accounted for 43 per cent of the turnover. Positions that involved a substantial amount of time in training were the ones that attracted the highest costing. The analysis revealed that those positions within the hotel which had the greatest impact on profit were people like the front office receptionists and those working in accounts.

E.

As unusual as it may sound, it is now a common understanding that offering employees more money is not necessarily a good solution to high employee turnover – often they leave because they simply dislike the work. Therefore, it was important to tackle the analysis from the perspective of what were the chief causes for staff leaving. A holistic approach was undertaken and several key findings emerged. The hotel found that fundamentally they adopted poor recruiting and selection practices. For example, it was shown that almost 35 per cent of the cleaning staff left after the first week and a further 25% during the first month. Candidates were being over-sold the job by recruiters and left soon after they encountered unrealistic job expectations.

F.

Devising solutions to these issues was the other half of the equation. As far a recruiting was concerned, they changed their approach by getting personnel from the hotel to handle it. Once this change was made, the attrition rates decreased substantially. To add to employee motivation, new staff were made aware of the mission and goals of the organization and how they would be paid above industry standard for striving to attain hotel values. New staff were shown where the hotel was heading and how they would have a guaranteed, stable employment situation with a major force in the hotel industry' – it was even suggested that after a period of employment, new staff might be given the opportunity to contribute to organizational goal setting.

G.

They had been losing many of their employees during the first month or two of employment, so they made new staff aware that bonuses would be offered to newly-hired employees at the end of their first three months which greatly assisted in goal setting. Staff luncheons and the in-house volleyball and basketball competitions remained an effective part of staff unity and development and a support program was also introduced to help all staff with any job-related issues which gave employees a heightened sense of being cared for by the establishment. Another area of change that proved successful was the introduction of the Valuable Employee Program (VEP). When a person was employed in the past they were assigned a senior member of staff who assisted them with getting used to their new job.

Н.

Due to the limitations of the senior member's position however, they were often not in a position to explain any details regarding future advancement. Now, when staff are employed, they are clearly told what is expected in the job and where it might lead to the right candidate. Hotel surveys revealed that over 30 per cent of employees were not satisfied with the career opportunities in their current jobs so the articulation of the definite and realistic opportunity for advancement through the VEP led to a major decrease in employee attrition. Once the ship had been righted and the relative returns on human resource investments had been calculated, setting priorities became a formality. Although at first a daunting task, the enormous cost of employee turnover offered an excellent

opportunity for the hotel to improve profitability.

Question 14-18

Complete the summary below of paragraphs A-D of Reading Passage 2. Choose ONE OR TWO WORDS from the passage for each answer. Write your answers in blank spaces next to 14-18 on your answer sheet.

Training new employees; d	lowntime as new employees get used to	their new job, and
unfavourable guest satisfac	ction levels all led to a large 14	for a large hotel
It was determined that the	solution to these problems, was in the re	duction of the
company's 15	The hotel addressed these issues in 4	ways through the
implementation of a 16	The efforts of the hotel	chief executive
decreased downtime and re	educed employee turnover which, in turr	n, resulted in
improvements in 17	The company position was	s improved by \$10
million. It is not common fo	or big companies to experience such 18_	

Question 19-21

Do the following statements reflect the claims of the writer in Reading Passage 2? In boxes 19-21 on your answer sheet write
YES, if the statement reflects the claims of the writer
NO, if the statement contradicts the claims of the writer
NOT GIVEN, if it is impossible to say what the writer thinks about this

- 19. It was surprising that positions with the highest turnover were not connected to high costs.
- 20. There was a clear connection between high costs and length of training.
- 21. New employees were given an incorrect description of their job.

Question 22-26

Reading Passage 2 gives FIVE effective changes that the hotel introduced for staff Choose these changes from list A-L below.

Write the appropriate letters A-K in boxes 22-26 on your answer sheet.

A changes

B discussed future plans

C introduced regular staff luncheons

D started a regular sports program

E clearly defined job expectations

F did their own staff recruiting

G built new sporting facilities

H involved new staff in goal setting

I offered bonuses to proven, committed new staff

J began meeting regularly with new staff

K implemented a support program L began recruiting through an employment service

22.			_	
23.			_	
24.				_
25.				

26.



SECTION 3

You should spend about 20 minutes on Questions 27-40 which are based on Reading Passage 3

Grimm's Fairy Tales

A.

The Brothers Grimm, Jacob and Wilhelm, named their story collection Children's and Household Tales and published the first of its seven editions in Germany in 1812. The table of contents reads like an A-list of fairy-tale celebrities: Cinderella, Sleeping Beauty, Snow White, Little Red Riding Hood, Rapunzel, Rumpelstiltskin, Hansel and Gretel, the Frog King. Drawn mostly from oral narratives, the 210 stories in die Grimm's' collection represent an anthology of fairy tales, animal fables, rustic farces, and religious allegories that remain unrivalled to this day.

В.

Such lasting fame would have shocked the humble Grimms. During their lifetimes the collection sold modestly in Germany, at first only a few hundred copies a year. The early editions were not even aimed at children. The brothers initially refused to consider illustrations, and scholarly footnotes took up almost as much space as the tales themselves. Jacob and Wilhelm viewed themselves as patriotic folklorists, not as entertainers of children. They began their work at a time when Germany had been overrun by the French under Napoleon, who was intent on suppressing local culture. As young, workaholic scholars, single and sharing a cramped flat, the Brothers Grimm undertook the fairy-tale collection with the goal of serving the endangered oral tradition of Germany.

C.

For much of the 19th-century teachers, parents, and religious figures, particularly in the United States, deplored the Grimms' collection for its raw, uncivilized content. Offended adults objected to the gruesome punishments inflicted on the stories' villains. In the original "Snow White" the evil stepmother is forced to dance in red-hot iron shoes until she falls down dead. Even today some protective parents shy from the Grimms' tales because of their reputation for violence.

D.

Despite its sometimes rocky reception, Children's and Household Tales gradually took root with the public. The brothers had not foreseen that the appearance of their work would coincide with a great flowering of children's literature in Europe. English publishers led the way, issuing high-quality picture books such as Jack and the Beanstalk and handsome folktale collections, all to satisfy a newly literate audience seeking virtuous material for the nursery. Once the Brothers Grimm sighted this new public, they set about refining and softening their tales, which had originated centuries earlier as earthy peasant fare. In the Grimms' hands, cruel mothers became nasty stepmothers, unmarried lovers were made chaste, and the incestuous father was recast as the devil.

E.

In the 20th century, the Grimms' fairy tales have come to rule the bookshelves of children's bedrooms. The stories read like dreams come true: handsome lads and beautiful damsels, armed with magic, triumph over giants and witches and wild beasts. They outwit mean, selfish adults. Inevitably the boy and girl fall in love and live happily ever after. And parents keep reading because they approve of the finger-wagging lessons inserted into the stories: keep your promises, don't talk to strangers, work hard, obey your parents. According to the Grimms, the collection served as "a manual of manners".

F

Altogether some 40 persons delivered tales to the Grimms. Many of the storytellers came to the Grimms' house in Kassel. The brothers particularly welcomed the visits of Dorothea Viehmann, a widow who walked to town to sell produce from her garden. An innkeeper daughter, Viehmann had grown up listening to stories from travellers on the road to Frankfurt. Among her treasure was "Aschenputtel" -Cinderella. Marie Hassenpflug was a 20-year-old friend of their sister, Charlotte, from a well-bred, French-speaking family. Marie's wonderful stories blended motifs from the oral tradition and from Perrault's influential 1697 book, Tales of My Mother Goose, which contained elaborate versions of "Little Red Riding Hood", "Snow White", and "Sleeping Beauty", among others. Many of these had been adapted from earlier Italian tales.

G.

Given that the origins of many of the Grimm fairy tales reach throughout Europe and into the Middle East and Orient, the question must be asked: How German are the Grimm tales? Very, says scholar Heinz Rolleke. Love of the underdog, rustic simplicity, creative energy—these are Teutonic traits. The coarse texture of life during medieval times in Germany, when many of the tales entered the oral tradition, also coloured the narratives. Throughout Europe, children were often neglected and abandoned, like Hansel and Gretel. Accused witches were burned at the stake, like the evil mother-in-law in "The Six Swans". "The cruelty in the stories was not the Grimm's fantasy", Rolleke points out" It reflected the law-and-order system of the old times".

Η.

The editorial fingerprints left by the Grimms betray the specific values of 19th-century Christian, bourgeois German society. But that has not stopped the tales from being embraced by almost every culture and nationality in the world. What accounts for this widespread, enduring popularity? Bernhard Lauer points to the "universal style" of the writing, you have no concrete descriptions of the land, or the clothes, or the forest, or the castles. It makes the stories timeless and placeless," The tales allow us to express 'our utopian longings'," says Jack Zipes of the University of Minnesota, whose 1987 translation of the complete fairy tales captures the rustic vigour of the original text. They show a striving for happiness that none of us knows but that we sense is possible. We can identify with the heroes of the tales and become in our mind the masters and mistresses of our own destinies."

I.

Fairy tales provide a workout for the unconscious, psychoanalysts maintain. Bruno Bettelheim famously promoted the therapeutic of the Grimms' stories, calling fairy tales the "great comforters. By confronting fears and phobias, symbolized by witches, heartless stepmothers, and hungry wolves, children find they can master their anxieties. Bettelheim's theory continues to be hotly debated. But most young readers aren't interested in exercising their unconsciousness. The Grimm tales, in fact, please in an infinite number of ways, something about them seems to mirror whatever moods or interests we bring to our reading of them. The flexibility of interpretation suits them for almost any time and any culture.

Questions 27-32

Do the following statements agree with the information given in Reading Passage 1? In boxes 27-32 on your answer sheet, write

YES if the statement is true

NO if the statement is false

NOT GIVEN if the information is not given in the passage

- 27. The Grimm brothers believed they would achieve international fame.
- 28. The Grimm brothers were forced to work in secret.
- 29. Some parents today still think Grimm fairy tales are not suitable for children.
- 30. The first edition of Grimm's fairy tales sold more widely in England than in Germany.
- 31. Adults like reading Grimm's fairy tales for reasons different from those of children.
- 32. The Grimm brothers based the story "Cinderella" on the life of Dorothea Viehmann

Questions 33-35

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

Write your answers in boxes 33-35 on your answer sheet.

- 33. In paragraph 4, what changes happened at that time in Europe?
- A. Literacy levels of the population increased.
- B. The development of printing technology made it easier to publish.
- C. Schools were open to children.
- D. People were fond of collecting superb picture books.
- 34. What changes did the Grimm Brothers make in later editions?
- A. They made the stories shorter.
- B. They used more oral language.
- C. The content of the tales became less violent.
- D. They found other origins of the tales.
- 35. What did Marie Hassenpflug contribute to the Grimm's Fairy tales?
- A. She wrote stories.
- B. She discussed the stories with them.

- C. She translated a popular book for the brothers using her talent for languages.
- D. She told the oral stories that were based on traditional Italian stories.

Questions 36-40

Complete the following summary of the paragraphs of Reading Passage Using NO MORE THAN TWO WORDS from the Reading Passage for each answer. Write your answers in boxes 36-40 on your answer sheet.

- 36. Heinz Rolleke said the Grimm's tales are "German" because the tales
- 37. Heinz Rolleke said the abandoned children in tales
- 38. Bernhard Lauer said the writing style of the Grimm brothers is universal because they
- 39. Jack Zipes said the pursuit of happiness in the tales means they
- 40. Bruno Bettelheim said the therapeutic value of the tales means that the fairy tales

A reflect what life was like at that time

B help children deal with their problems

C demonstrate the outdated system

D tell of the simplicity of life in the German countryside

E encourage people to believe that they can do anything

F recognize the heroes in the real life

G contribute to the belief in nature power

H avoid details about characters' social settings.

SECTION 3

The Mozart Effect

Α.

Music has been used for centuries to heal the body. In the Ebers Papyrus (one of the earliest medical documents, circa 1550 BC), it was recorded that physicians chanted to heal the sick (Castleman, 1994). In various cul-tures, we have observed singing as part of healing rituals. In the world of Western medicine, however, using music in medicine lost popularity until the introduction of the radio. Researchers then started to notice that lis-tening to music could have significant physical effects. Therapists noticed music could help calm anxiety, and researchers saw that listening to music, could cause a drop in blood pressure. In addition to these two areas, music has been used with cancer chemotherapy to reduce nausea, during surgery to reduce stress hormone production, during childbirth, and in stroke re-covery (Castleman, 1994 and Westley, 1998). It has been shown to decrease pain as well as enhance the effectiveness of the immune system. In Japan, compilations of music are used as medication of sorts. For example, if you want to cure a headache or a migraine, the album suggested is Mendelssohn's "Spring Song", Dvorak's "Humoresque", or part of George Gershwin's "An American in Paris" (Campbell, 1998). Music is also being used to assist in learning, in a phenomenon called the Mozart Effect.

В.

Frances H. Rauscher, PhD, first demonstrated the correlation between mu-sic and learning in an experiment in 1993. His experiment indicated that a 10-minute dose of Mozart could temporarily boost intelligence. Groups of students were given intelligence tests after listening to silence, relaxation tapes, or Mozart's "Sonata for Two Pianos in D Major" for a short time. He found that after silence, the average IQ score was 110, and after the relax-ation tapes, the score rose a point. After listening to Mozart's music, how-ever, the score jumped to 119 (Westley, 1998). Even students who did not like the music still had an increased score in the IQ test. Rauscher hypothesised that "listening to complex, non-repetitive music, like Mozart's, may stimulate neural pathways that are important in thinking" (Castleman, 1994).

C.

The same experiment was repeated on rats by Rauscher and Hong Hua Li from Stanford. Rats also demonstrated enhancement in their intelligence performance. These new studies indicate that rats that were exposed to Mozart's showed "increased gene expression of BDNF (a neural growth factor), CREB (a learning and memory compound), and Synapsin I (a synaptic growth protein) " in the brain's hippocampus, compared with rats in the control group, which heard only white noise (e.g. the whooshing sound of a V radio tuned between stations).

D.

How exactly does the Mozart Effect work? Researchers are still trying to determine the

actual mechanisms for the formation of these enhanced learning pathways. Neuroscientists suspect that music can actually help build and strengthen connections between neurons in the cerebral cortex in a process similar to what occurs in brain development despite its type.

When a baby is born, certain connections have already been made - like connections for heartbeat and breathing. As new information is learned and motor skills develop, new neural connections are formed. Neurons that are not used will eventually die while those used repeatedly will form strong connections. Although a large number of these neural connections require experience, they must also occur within a certain time frame. For example, a child born with cataracts cannot develop connections within the visual cortex. If the cataracts are removed by surgery right away, the child's vision develops normally. However, after the age of 2, if the cataracts are re-moved, the child will remain blind because those pathways cannot establish themselves.

E.

Music seems to work in the same way. In October of 1997, researchers at the University of Konstanz in Germany found that music actually rewires neural circuits (Begley, 1996). Although some of these circuits are formed for physical skills needed to play an instrument, just listening to music strengthens connections used in higher-order thinking. Listening to music can then be thought of as "exercise" for the brain, improving concentration and enhancing intuition.

F.

If you're a little sceptical about the claims made by supporters of the Mozart Effect, you're not alone. Many people accredit the advanced learning of some children who take music lessons to other personality traits, such as motivation and persistence, which are required in all types of learning. There have also been claims of that influencing the results of some experiments.

G.

Furthermore, many people are critical of the role the media had in turning an isolated study into a trend for parents and music educators. After the Mozart Effect was published to the public, the sales of Mozart CDs stayed on the top of the hit list for three weeks. In an article by Michael Linton, he wrote that the research that began this phenomenon (the study by re-searchers at the University of California, Irvine) showed only a temporary boost in IQ, which was not significant enough to even last throughout the course of the experiment. Using music to influence intelligence was used in Confucian civilisation and Plato alluded to Pythagorean music when he described its ideal state in The Republic. In both of these examples, music did not cause any overwhelming changes, and the theory eventually died out. Linton also asks, "If Mozart's music were able to improve health, why was Mozart himself so frequently sick? If listening to Mozart's music increases intelligence and encourages spirituality, why aren't the world's smartest and most spiritual people Mozart specialists?" Linton raises an interesting point, if the Mozart Effect causes such significant changes, why isn't there more documented evidence?

Н.

The "trendiness" of the Mozart Effect may have died out somewhat, but there are still strong supporters (and opponents) of the claims made in 1993. Since that initial experiment, there has not been a surge of support-ing evidence. However, many parents, after playing classical music while pregnant or when their children are young, will swear by the Mozart Effect. A classmate of mine once told me that listening to classical music while studying will help with memorisation. If we approach this controversy from a scientific aspect, although there has been some evidence that music does increase brain activity, actual improvements in learning and memory have not been adequately Demonstrated.

Questions 1-5

Section 1 has eight paragraphs A-H.

Which paragraph contains the following information?

Write the correct letter A-H in boxes 1-5 on your answer sheet.

- 1. A description of how music affects the brain development of infants
- 2. Public's first reaction to the discovery of the Mozart Effect
- 3. The description of Rauscher's original experiment
- 4. The description of using music for healing in other countries
- 5. Other qualities needed in all learning

Questions 6-8

Complete the summary below.

Choose NO MORE THAN ONE WORD from the passage for each answer.

Write your answers in boxes 6-8 on your answer sheet.

During the experiment cond	ucted by Frances Rauscher, s	subjects were exposed	i to the
music for a 6	period of time before they wer	e tested. And Rausch	er
believes the enhancement i	n their performance is related	to the 7	nature
of Mozart's music. Later, a s	similar experiment was also re	peated on 8	

Questions 9-13

Do the following statements agree with the information given in Reading Passage 1? In boxes 9-13 on your answer sheet, write

TRUE if the statement agrees with the information

FALSE if the statement contradicts the information

NOT GIVEN if there is no information on this

- 9. All kinds of music can enhance one's brain performance to somewhat extent.
- 10. There is no neural connection made when a baby is born.
- 11. There are very few who question the Mozart Effect.
- 12. Michael Linton conducted extensive research on Mozart's life.

13. There is not enough evidence in support of the Mozart Effect today.



SECTION 2

Vitamins – to supplement or not

Α.

Mineral, vitamin, and antioxidant health supplements make up a multi-billion-dollar industry in the United States alone, but do they really work? Evidence suggests supplementation is clearly indicated in special circumstances, but can actually be harmful in others. For the general population, however, supplements have negligible or no impact on the prevention of common cancers, cardiovascular diseases, cognitive decline, mortality, or any other major indicators of health. In pursuit of a longer, happier and healthier life, there are certainly better investments for most people than a tube of vitamin Supplements.

В.

Particular sub-groups of the population can gain a proven benefit from supplementation. Folic acid has long been indicated as a prenatal supplement due to its assistance in foetal cell division and corresponding ability to prevent neural tube birth defects. Since Canada and the United States decided to require white flour to be fortified with folic acid, spinal birth defects have plummeted by 75%, and rates of neuroblastoma (a ravaging form of infant cancer) are now 50% lower. In countries without such fortification, or for women on low-carbohydrate diets, a prenatal multivitamin could make the crucial difference. The United States Department of Health and Human Services has concluded that the elderly may also benefit from extra vitamin D; calcium can help prevent bone fractures; and zinc and antioxidants can maintain vision while deflecting macular degeneration in people who would otherwise be likely to develop this affliction.

C.

There is mounting evidence, however, for many people to steer clear of multivitamins. The National Institutes of Health has noted a "disturbing evidence of risk" in tobacco users: beta-carotene, a common ingredient in multivitamins, was found over a six-year study to significantly contribute to higher lung cancer and mortality rates in smokers. Meanwhile, excessive vitamin A (a supplement often taken to boost the immune system) has been proven to increase women's risk of a hip fracture, and vitamin E, thought to improve cardiovascular health, was contraindicated in a study that demonstrated higher rates of congestive heart failure among such vitamin users. Antioxidant supplementation has no purpose nor does it achieve anything, according to the Food and Nutrition Board of the National Academy of Sciences, and the Medical Letter Group has gone further in suggesting they may interfere with treatment and promote some cancers. Antioxidants are generally regarded as counteracting the destructive effect of free radicals in the body. but according to the Medical Letter's theory, free radicals may also serve the purpose of sending a powerful signal to the body's immune system to fix the damage. By taking supplements, we risk undermining that message and upsetting the balance of antioxidants and free radicals in the body. The supplements counteract the free radicals, the immune system is not placed on alert, and the disease could sneak through the gates.

D.

One problem with supplementation by tablet is the poor record on digestibility. These tablets are often stocked with metal-based minerals that are essentially miniature rocks, and our bodies are unable to digest them. Even the vitamin elements of these pills that are theoretically digestible are often unable to be effectively extracted by our bodies when they arrive in such a condensed form. In Salt Lake City, for example, over 150 gallons of vitamin and mineral pills are retrieved from the sewer filters each month. According to the physician's desk reference, only about 10% - 20% of multivitamins are absorbed by the body. The National Advisory Board is even more damning, suggesting that every 100mg of tablet corresponds to about 8.3mg of blood concentration, although noting that this can still potentially perform a helpful role in some cases. In effect, for every \$100 you spend on vitamin supplements, over \$90 of that is quite literally flushed down the toilet.

E.

A final argument against multivitamins is the notion that they can lead people – consciously or not – to the conclusion that supplementation fills in the gaps of an unhealthy diet and mops up afterwards, leaving their bodies none the wiser that instead of preparing a breakfast of fresh fruit and muesli, they popped a tiny capsule with coffee and a chocolate bar. In a seven-year study, however, the Heart Protection study did not find any positive outcome whatsoever from multivitamins and concluded that while vitamins in the diet are important, multivitamin tablets are safe but completely useless. There is evidently no shortcut around the task of buying, preparing, and consuming fresh fruit and vegetables every day. Boosting, supplementing, and fortifying products alter people's very perception of what healthy food is; instead of heading for the fresh produce aisle in the supermarket, they are likely to seek out sugary, processed foods with a handful of extra B vitamins as a healthy choice. We cannot supplement our way out of a bad diet.

Questions 14-16

Choose the correct letter, A. B, C, or D. Write the correct letters in boxes 14-16 on your answer sheet.

- 14. The writer does not recommend multivitamin supplementation for ______A. pregnant woman.B. young children.C. anyone prone to eye problems.D. old people.
- 15.According to the writer, vitamin E has been shown to_____
- A. lead to heart problems.
- B. be good for heart health.
- C. support the immune system.
- D. have no effect.

- 16. The Medical letter Group believes antioxidant supplementation____
- A. is ineffective in attacking free radicals.
- B. alerts the immune system to the presence of free radicals.
- C. attacks both free radicals and the immune system.
- D. prevents the immune system from responding to free radicals.

Questions 17-21

Do the following statements agree with the information given in section 2? In boxes 17-21 on your answer sheet, write YES if the statement agrees with the views of the writer NO if the statement contradicts the views of the writer NOT GIVEN if it is impossible to say what the writer thinks about this

- 17. Some multivitamin tablets have indigestible ingredients.
- 18. Some individual vitamins are better absorbed than others in a tablet form.
- 19. Our bodies cannot distinguish food-based from supplement-based vitamins.
- 20. Multivitamins can lead to poorer overall eating habits in a person's life.
- 21. People typically know that fortified processed foods are not good for them.

Questions 22-26

Classify the following groups of people according to whether they believe Write the correct letter A, B or C, in boxes 22-26 on your answer sheet.

- A. the supplementation may have a positive effect
- B. the supplementation may have a negative effect
- C. supplementation has no effect
- 22. The United States Department of Health and Human Services
- 23. The National Institutes of Health
- 24. The Food and Nutrition Board of the National Academy of Sciences
- 25. The National Advisory Board
- 26. The Heart Protection Group

LONG-TERM FORECAST: HOT AND DRY

Α.

Melting land ice in the Arctic is set to cause a global rise in sea levels, leading to disastrous effects for both man and wildlife. Many species worldwide are threatened with extinction, and low-lying islands and landmasses will disappear entirely. But the havoc wreaked by the effect of greenhouse gases won't be confined to just too much water, but the absence of it, as well. In other words, desertification. A decrease in the total amount of rainfall in arid and semi-arid areas could increase the total area of drylands worldwide, and thus the total amount of land potentially at risk from desertification.

В.

Desertification is officially recognised as land degradation in arid, semi-arid and dry subhumid areas resulting from various factors including climatic variations and human activities. This degradation of formerly productive land is a complex process. It involves multiple causes, and it proceeds at varying rates in different climates. Desertification may intensify a general climatic trend, or initiate a change in local climate, both leading towards greater aridity. The more arid conditions associated with desertification accelerate the depletion of vegetation and soils. Land degradation occurs all over the world, but it is only referred to as desertification when it takes place in drylands. This is because these areas are especially prone to more permanent damage as different areas of degraded land spread and merge together to form desert-like conditions.

C.

Global warming brought about by increasing greenhouse gas levels in the atmosphere is expected to increase the variability of weather conditions and extreme events. Many dryland areas face increasingly low and erratic rainfalls, coupled with soil erosion by wind and the drying-up of water resources through increased regional temperatures. Deforestation can also reduce rainfall in certain areas, increasing the threat of desertification. It is not yet possible, despite sophisticated technology, to identify with an acceptable degree of reliability those parts of the Earth where desertification will occur. Existing drylands, which cover over 40% of the total land area of the world, most significantly in Africa and Asia, will probably be most at risk from climate change. These areas already experience low rainfall, and any that falls is usually in the form of short, erratic, high-intensity storms. In addition, such areas also suffer from land degradation due to over-cultivation, overgrazing, deforestation and poor irrigation practices.

D.

It is a misconception that droughts cause desertification. Droughts are common in arid and semi-arid lands. Well-managed lands can recover from drought when the rains return. Continued land abuse during droughts, however, increases land degradation. Nor does desertification occur in linear, easily definable patterns. Deserts advance erratically, forming patches on their borders. Areas far from natural deserts can degrade quickly to barren soil, rock, or sand through poor land management. The presence of a nearby

desert has no direct relationship to desertification. Unfortunately, an area undergoing desertification is brought to public attention only after the process is well underway. Often little or no data are available to indicate the previous state of the ecosystem or the rate of degradation. Scientists still question whether desertification, as a process of global change, is permanent or how and when it can be halted or reversed.

E.

But desertification will not be limited to the drylands of Africa and Asia. According to the environmental organisation Greenpeace, the Mediterranean will suffer substantially, too. If current trends in emissions of greenhouse gases continue, global temperatures are expected to rise faster over the next century than over any time during the last 10,000 years. Significant uncertainties surround predictions of regional climate changes, but it is likely that the Mediterranean region will also warm significantly, increasing the frequency and severity of droughts across the region. As the world warms, global sea levels will rise as oceans expand and glaciers melt. Around much of the Mediterranean basin, sea levels could rise by close to 1m by 2100. As a result, some low-lying coastal areas would be lost through flooding or erosion, while rivers and coastal aguifers would become saltier. The worst affected areas will be the Nile Delta, Venice in Italy and Thessaloniki in Greece, two major cities where local subsidence means that sea levels could rise by at least one-and-a-half times as much as elsewhere. The consequences of all this say Greenpeace, are far-reaching, and the picture is a gloomy one. Livestock production would suffer due to a deterioration in the quality of rangeland. Yields of grains and other crops could decrease substantially across the Mediterranean region due to increased frequency of drought. Crop production would be further threatened by increases in competition for water and the prevalence of pests and diseases and land loss through desertification and sea-level rise. The combination of heat and pollution would lead to an upsurge in respiratory illness among urban populations, while extreme weather events could increase death and injury rates. Water shortages and damaged infrastructure would increase the risk of cholera and dysentery, while higher temperatures would increase the incidence of infectious diseases, such as malaria and dengue fever. Serious social disruption could occur as millions are forced from their homelands as a result of desertification, poor harvests and sea-level rise, while international disputes over shared water resources could turn into conflict.

G.

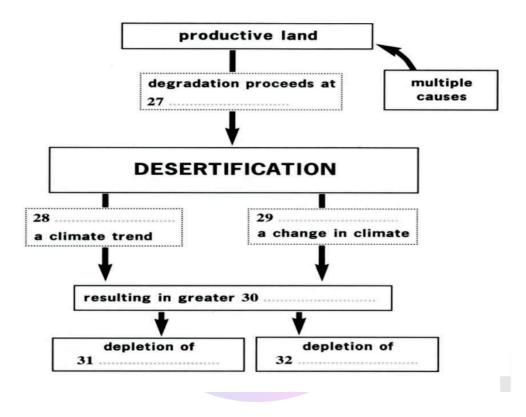
Future climate change could critically undermine efforts for sustainable development in the Mediterranean region through its impacts on the environment and social and economic well-being. While in many respects climate change exacerbates existing problems instead of creating new ones, the sheer magnitude of the potential problem means it cannot be ignored. There is some scope for adaptation, but the fact that many measures would be beneficial irrespective of climate change suggests that radical changes in our policies and practices will be needed. It is also vital that developed countries meet their obligations to assist adaptation in developing countries through access to know-how and financial assistance. Ultimately, however, the long-term

sustainability of the Mediterranean region requires keeping climate change within tolerable bounds. Current understanding of safe limits points to the need for prompt international agreement – and action – to make the drastic cuts in emissions of greenhouse gases required to stabilize atmospheric concentrations of these gases.

Questions 27-32

Complete the flow-chart below

Write NO MORE THAN THREE WORDS for each answer.



Questions 33-36

Section 3 has seven paragraphs, A-G.

Which paragraph contains the following information?

Write the correct letter A-G in boxes 33-36 on your answer sheet.

- 33. Human intervention is a potential solution to a potential disaster.
- 34. The rate of climate change is set to accelerate dramatically.
- 35. There is seldom enough information available in some areas to track how fast the effects of climate change have happened in the past.
- 36. Desertification is attributable to a number of factors.

Questions 37-40

Complete the summary with the list of words A-I below.

Write the correct letter A-I in boxes 37-40 on your answer sheet.

A irrigation B cooling C drylands
D cause E loss F abuse
G desertification H deserts I emission



Reading Test 4

SECTION 1

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

Questions 1-5

Reading Passage 1 has 9 paragraphs A-I.

From the List of headings below choose the 5 most suitable headings for paragraphs B, C, D, E and F. Write the appropriate numbers (i-x). NB There are more headings than paragraphs, so you will not use them all.

List of Headings

- i. A convenient and cost-effective solution
- ii. Encouraging audience participation
- iii. The backup technology
- iv. Tailoring the service
- v. Success brought by interactive software
- vi. The features of the new platform
- vii. Synchronization and connectivity
- viii. The application server
- ix. The Mobile Interactive TV Platform
- x. Different market segmentation
- 1. Paragraph B
- 2. Paragraph C
- 3. Paragraph D
- 4. Paragraph E
- 5. Paragraph F

TV

A.

Interactive production company Two Way TV has been commissioned by ITV Play to create a unique new programming strand, Play DJ. Play DJ features a number of Playalong SMS games, produced using Two Way TV's unique Simcast text-to-TV platform. William van Rest, Controller of ITV Play, said: "Play DJ is a little bit different from the traditional quiz TV formats, contributing to our aim of moving the sector on. It has a unique blend of entertainment and game play which we hope will build up a loyal following".

B.

Broadcasters, programme-makers and TV networks now have the widest ever range of interactive TV and mobile to TV products and services available. With interactive software solutions, TV networks like ITV and BBC Channel 4 have succeeded in designing and building many of flagship services including Pop Idol, The Premiership

and Big Brother. More recently, Two Way TV helped ITV go interactive on cable TV for the first time with X Factor and This Morning.

C.

The sudden surge in the number of interactive TV platforms clearly demonstrates that viewers are enjoying participating in voting, quizzes and other interactive activities using their mobile phones. The "getting the audience involved" experience lets viewers interact with one another or with content associated with reality shows, regular shows, or advertisements by sending in messages that are displayed or accumulated on the television screen. They can answer questions, cast votes or predict what's about to happen on screen. The voting and response services utilize the mobile phone of the TV viewer to interactively and directly participate in what's happening on TV-simply by sending his vote or SMS message to a premium number during the broadcast of the TV programme. The solution can analyze up to 6,000 SMS per second and provides an easy-to , p p y use web-based administration tool to track and manage the SMS and MMS traffic. It also generates graphical results that bring value to the show and act as a compulsive element for audience participation.

D.

The primary technological underpinnings of the new platform are an application server, located in the service provider's computer center, and a broadcasting system installed at the broadcaster's central control station. The application server provides web-based tools for the moderation and selection of SMS and MMS messages, and its graphical user interface (GUI) enables screen design and control of the programme. In addition, the server provides all the interface connections with SMS and MMS gateways, as well as with mobile operators' billing systems. The broadcasting system, meanwhile, creates the video signals for TV broadcast, and otters interfaces with programme planning tools, video servers, and text and graphics generators.

E.

Whereas the market was previously characterized by closed, proprietary platforms that offered broadcasters only one limited alternative and necessitated using different platforms for different applications, the new platform, differentiated in the marketplace by p, p y its open and modular approach, enables numerous applications, and provides interfaces for the seamless integration of games and TV formats from third-party providers. The differences between mobile interactive TV platform and other technologies in the market add up to this; fast and easy creation, delivery, integration, and management of rich media interactive TV applications into live or prerecorded programs. The Mobile Interactive TV Platform allows broadcasters to integrate interactive services into their TV programme. Broadcasters merely have to select the desired services from the platform. Applications, like SMS2TV. MMS2TV, games, chats or votings, can be used in any combination. The production phase of interactive TV applications should not require costly programming and specialist technical knowledge. The TV programme can be arranged individually by means of a userfriendly graphical

user interface. A suite of software and hardware is available that delivers multimode applications for broadcasters and other application service providers.

F.

The mobile platform offers convenience and a cost-effective solution to the broadcaster, while putting great emphasis on reliability. Its key features include a provisioning environment, synchronization of diverse media while supporting mass interactions by many viewers supporting mass interactions by many viewers to the same TV application in a real-time mode, enabling the easy creation of TV applications, the production of very low-cost TV applications, and a high degree of connectivity to external interfaces. These features are ideal for media owners who want to reach users regardless of their public network provider. They give a fast and reliable platform for processing high volume traffic, seamless connections to communication networks and to the broadcast control room, an "invisible" dynamic and flexible billing system and an interactive "back channel" (an immediate, "always-on" channel through which users can respond or receive messages in any format: SMS, MMS, ringtones, icons, etc.).

G.

This is a real end-to-end solution tying all the knots needed to create a show that gather information from a magnitude of diverse media, while handling aspects of accounting, connecting to all kinds of cellular networks, supplying scalable and robust configurations, and referring to third parties for purposes of playing for real money, raising donations, and even selling services and products.

Н.

For these reasons texting and other user interactions in response to television fl I programming or to influence television programming have gained a lot of popularity lately. Next-generation television services that focus on interactivity are most likely to find success in Spain, the UK and Japan, with the US ranking sixth in a study that examines the digital readiness of 12 countries for interactive and personalized television services. In Spain, nearly 80% of those surveyed showed an interest in at least one key advanced television offering, especially those related to interactive features such as personalized recommendations and voting. In both the UK and Japan, 75% showed an inclination towards interactive services.

I.

"Different populations have quite unique reactions to an interest in applications regarding advanced TV services," said Deepa Iyer, research analyst at Parks Associates. "Consumers in the United Kingdom are more inclined toward interactive features such as voting abilities whereas the Japanese prefer features such as personalized recommendations and one-button access capabilities. "The ' one size fits all' mind-set regarding television services is obsolete," Iyer said. "The challenge is to meet the

broadcaster's needs quickly, limiting the amount of time required to make a broadcast-

quality product and to allow all the viewers to participate."

Questions 6-9

Matching the following descriptions as referring to

- A. SMS
- B. GUI
- C. Back Channel
- D. The Application Server
- E. The Mobile Interactive TV Platform
- 6.It provides a passage though which users receive and send messages.
- 7. It enables screen design and control of the programme.
- 8. It provides web-based tools to select messages.
- 9. It enables broadcasters to combine interactive services with their TV programmes.

Questions 10-13

Do the following statements agree with the information given in Reading Passage 1? In boxes 10-13 on your answer sheet write

TRUE, if the statement is true

FALSE, if the statement is false

NOT GIVEN, if the information is not given in the passage.

- 10. The Japanese market calls for more promotional messaging.
- 11. The United States was among the first countries to implement Two Way TV
- 12. Texting is just one form of user interface
- 13. UK consumers prefer conventional TV, as they are a more passive audience

SECTION 2

You should spend about 20 minutes on Questions 14 — 27 which are based on Reading

SPELLING SYSTEM REFORM

A.

Our children are being beaten up by a crazy spelling system that appears to be loved by millions. They are being beaten up because they are constantly bombarded by unpredictable silent letters, double consonants that defy explanation, endless varieties of vowel combinations, and rules that are notoriously unreliable. They are forced to attempt to learn a system that is illogical, inconsistent, and — system that is illogical, inconsistent, and — worst of all — needlessly complicated. Not only are they physically beaten up. but many of them do end up with well-concealed scars on their psyches. At least one study has shown that using a system as irrational as ours may arrest the development of logical thinking. That's not just being beating up; it's child abuse exactly.

В.

There's a social stigma attached to being a poor speller, although the only thing being a good speller makes one better at is spelling. It doesn't make one a better writer, a better poet, a more creative person with words. it doesn't make him understand the essence of the language better. Shakespeare would have been the exact same creative genius he was whether he was a good or bad speller. He was just lucky enough to have lived in a day when he was judged by the meaning of his words, rather than the placement of the letters within those words. In Shakespeare's day, most people's spelling was erratic; therefore, when he spelled words many different ways no one even noticed.

C.

During the last 30 years or so, literacy in the English-speaking world has been declining at an alarming rate. It's not hard to guess why. During the rapid development of electronics in the past 40 years speech for the first time in the entire years, speech, for the first time in the entire course of history, has become a mass medium. The people, having discovered those electronic channels through which they can receive Information in their own language, are now circumventing the outdated writing system which has been the bottleneck in mass communication. And having alienated themselves from it, they have become less able and less willing to cope with its irrational complexities. In an attempt to correct this situation, the Federal Government of the United States initiated its "Decade of the '70's" program.

During that ten-year period, both State and Federal governments have poured massive sums into programs designed to eradicate illiteracy not by re designing the outdated writing system, but by attempting to shape the minds of human beings into conformity with the system. This extravagant program achieved nothing. The drift to illiteracy continues as before, except that it now has reached the proportions of a crisis. For example, the United States Navy now complains that from 40% to 50% of today's recruits can't read the instruction manuals. The Navy is plainly

worried about the future. And they are not alone.

D.

The problem in the English-speaking world is that the writing system has been shaped a bit, here and there. In the direction of Modern English, but the fact is that its spelling is based primarily on another language. Middle English, which hasn't been spoken in at least 400 years, and is no longer understood. From the point of view of a technician, this problem is easily solved. All one needs to do is to design a writing system specifically for Modern English, so that all three elements in the chain of communication can function in harmony. The proposal is that we systematically and definitively wipe out all the anomalous spellings in English so that anyone looking at a word in print will immediately know how to pronounce it — and, conversely, anyone attempting to write English will be able to get every single spelling right the first time. In other words, proponents of English spelling reform want us to adopt a mostly phonetic orthography. Indeed, a certain amount of reform has happened all by itself over the years, as previously alternative spellings have worked their way into the dictionary as standard forms. Think of the word "catalog", which was formerly spelled "catalogue", or "draft", formerly spelled "draught".

E.

On a relatively small scale, sensible spellings do sometimes replace less sensible ones. But the design of a new writing system is only a partial solution. The major obstacle that confronts the orthographic reformer is the existing system itself, which, with all its scandalous lack of utility, happens to be an Investiture that seems to defy displacement. The first question that arises is how far such a reform would go. We could make a good start by simply removing letters that are never pronounced. Though could become tho, guard could become gard, foreign could become forin, doubt could become dout, Christmas could become Chrismas, and so on. We could also, perhaps, reduce the number of ways to write any particular sound — so the "ee" sound in street, for example, might always be written "ee", never "ea", "ie", "ei", "ie", "e", or whatever. Although these changes would help, however, they would save only a subset of the problems — and the more extensive the changes are, the more difficult they would be for the public to accept.

F.

Since we've already programmed our brains to work under the current, flawed system simplified spellings would be at least initially — much harder for all the hundreds of millions of English readers to read. There's also that little matter of what to do with the billions of books, magazines, web sites, and other documents that already use the "old" spelling. Then there are those who point out that a word's spelling gives important clues to its etymology, meaning, and relationship to other words. So even though the "a" in the word real is not pronounced, It serves the important function of showing the word's connection to the word " reality", in which the " a " is pronounced. Lose that letter, and the words no longer appear to have anything to do with each other. Thus, at least some of the peculiarities of English spelling exist for entirely legitimate, and still useful,

historical reasons.

Sir Winston Churchill opposed a spelling reform bill in British parliament in 1949. He felt that changing the appearance of words would "mess up the language of Shakespeare" If Mr. Churchill had understood the detrimental effect that needlessly complex spelling has on literacy, he would have realized that unreformed spelling ruins the language of Shakespeare because it prevents an extra 10% of the population from being literate enough to read t. That may be too high a price to pay.

Questions 14 — 20

Do the following statements agree with the information given in Reading Passage 2? In boxes 14-20 on your answer sheet write

TRUE, if the statement is true

FALSE, if the statement is false

NOT GIVEN, if the information is not given in the passage.

- 14. The presence of unpronounced letters sometimes serves to connect meanings of words.
- 15. Some people already used new spelling systems to write books and magazines.
- 16. The problem lies not with the system of spelling but with the method of teaching.
- 17. Simplified spelling would not be immediately successful because we have grown accustomed to the flawed system.
- 18. The current spelling system may hinder children from developing logical thinking
- 19. The program initiated by the Federal Government aimed at eliminating illiteracy.
- 20. Shakespeare was both a good writer and speller

Questions 21-23

Complete the sentences below	USING NO MORE	THAN THREE	WORDS taken from
the passage.			
21. Spelling reform is based on	an essentially	orthography	
22. The spelling system we use	todav has a	effect on peopl	e's literacy.

23. Churchill feared that a spelling reform hill would the language of

Shakespeare.

Questions 24-27

Match the following statements with their example word.

- A. self-change over time
- B. limited way to write
- C. unpronounced letter
- D. unpronounced letter works
- 24. real
- 25. Christmas
- 26. catalogue
- 27. street

SECTION 3

You should spend about 20 minutes on Questions 28 40, which are based on Reading Passage 3 below.

PERFUME

A.

Perfume comes from the Latin "per" meaning "through" and "fumum", or "smoke". Many ancient perfumes were made by extracting natural oils from plants through pressing and steaming. The oil was then burned to scent the air. Since the beginning of recorded history, humans have attempted to mask or enhance their own odor by using perfume, which emulates nature's pleasant smells. Many natural and man-made materials have been used to make perfume to apply to the skin and clothing, to put in cleaners and cosmetics, or to scent the air. Because of differences in body chemistry, temperature, and body odors, no perfume will smell exactly the same on any two people.

В.

Before perfumes can be composed, the odorants used in various perfume compositions must first be obtained. Synthetic odorants are produced through organic synthesis and purified. Odorants from natural sources require the use of various methods to extract the aromatics from the raw materials Enfleurage a process from the raw materials. Enfleurage, a process that uses odorless fats that are solid at room temperature to capture the fragrant compounds exuded by plants, is the oldest of fragrance extraction techniques. The process can be "cold" enfleurage or "hot" enfleurage. In cold enfleurage, a large framed plate of glass, called a chassis, is smeared with a layer of animal fat, usually from pork or beef, and allowed to set. Botanical matter, usually petals or whole flowers, is then placed on the fat and its scent is allowed to diffuse into the fat over the course of 13 days. The process is then repeated by replacing the spent botanicals with fresh ones until the fat has reached a desired degree of fragrance saturation.

C.

In hot enfleurage, solid fats are heated and botanical matter is stirred into the fat. Spent botanicals are repeatedly strained from the fat and replaced with fresh material until the fat is saturated with fragrance. In both instances, the fragrance-saturated fat is now called the "enfleurage pomade". The enfleurage pomade is washed or soaked in ethyl alcohol to draw the fragrant molecules into the alcohol. The alcohol is then separated from the fat and allowed to evaporate, leaving behind the essential oil of the botanical matter. The spent fat is usually used to make soaps since it is still relatively fragrant. This method of fragrance extraction is by far one of the oldest. It is also highly inefficient and costly but was the sole method of extracting the fragrant compounds in delicate floral botanical such as jasmine and tuberose, which would be destroyed or denatured by the high temperatures required by methods of fragrance extraction such as steam distillation. The method is now superseded by more efficient techniques such as solvent extraction or

supercritical fluid extraction using liquid carbon dioxide (CO2) or similar compressed Gases.

D.

The results of the extraction are either essential oils, absolutes, concretes, or butters, depending on the amount of waxes in the extracted product. All these techniques will to a certain extent, distort the odour of the aromatic compounds obtained from the raw materials. This is due to the use of heat, harsh solvents, or through exposure to oxygen in the extraction process which will denature the aromatic compounds, which either change their odour character or renders them odourless. The country-island Madagascar—known for its extremely unique biodiversity—is recognized as holding tremendous potential for the development of new products in the essential oils, cosmetic and body care, due to the fact that 80% of its flora and fauna is endemic—meaning so unique that they are found nowhere else in the world.

E.

For 85 million years, the flora and fauna of Madagascar evolved in isolation from the rest of the world. Examples of the totally unique essential oils and botanicals from Madagascar include the Ravinsara leaf known for its aroma, spice and therapeutic applications. Aromatherapists believe that the oil can travel deep into muscle tissues and joints. Some have suggested that the oil has antiviral properties, and it is thought to relieve rheumatism and joint inflammation. Another totally unique essential oil from Madagascar to relieve rheumatic pains is Katrafay, which is also used in Madagascar by women after giving birth as a fortifier and tonic. It is also believed to have anti-inflammatory properties. Cinnamosma fragrans is used traditionally as a decoction for treatment of malarial symptoms. The essential oil is used for tired and aching muscles.

F.

According to suppliers, there are quite a few other high quality aromatherapy oils produced in Madagascar. These include niaouli used for clearing, cleansing and mental stimulation; lantana camara used for flu, colds, coughs, fevers, yellow fever, dysentery and jaundice; ylang-ylang used as an aphrodisiac; cinnamon (bark and leaf) used to destroy microbes and bacteria, and holding promise for people with diabetes; tamanu (Calophyilum inophyllum) used to treat skin ailments; wild orange petit grains, used as a lively and soothing fragrance and to relieve dry skin; a unique ginger (fresh) oil used for circulation, aching muscles and nausea; and clove bud oil, which has been utilized as a local anesthetic in dentistry, as a food preservative and as on alternative to Deet.

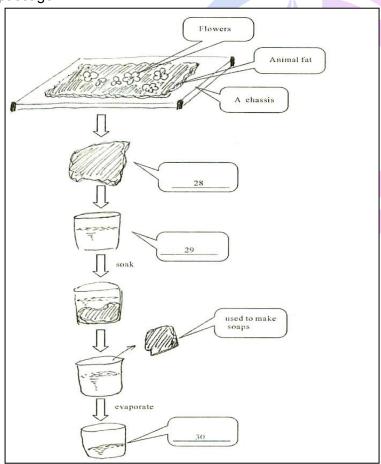
G.

Because perfumes and essential oils depend heavily on harvests of plant substances and the availability of animal products, perfumery can often turn risky. Thousands of flowers are needed to obtain just one pound of essential oils, and if the season's crop is destroyed by disease or adverse weather, perfumeries could be in jeopardy. In addition, consistency is hard to maintain in natural oils. The same species of plant raised in several

different areas with slightly different growing conditions may not yield oils with exactly the same scent. Problems are also encountered in collecting natural animal oils. Many animals once killed for the value of their oils are on the endangered species list and now cannot be hunted. For example, sperm whale products like ambergris have been outlawed since 1977. Also, most animal oils in general are difficult and expensive to extract. Deer musk must come from deer found in Tibet; civet cats, bred in Ethiopia, are kept for their fatty gland secretions; beavers from Canada and the former Soviet Union are harvested for their castor. Synthetic perfumes have allowed perfumers more freedom and stability in their craft, even though natural ingredients are considered more desirable in the very finest perfumes. The use of synthetic perfumes and oils eliminates the need to extract oils from animals and removes the risk of a bad plant harvest, saving much expense and the lives of many animals.

Questions 28-30

The flowchart below demonstrates the cold enfleurage method of fragrance extraction. Complete the flowchart with NO MORE THAN THREE WORDS for each blank from the passage.



Questions 31-34

Do the following statements agree with the information given in Reading Passage 3?

In boxes 31-34 on your answer sheet write;
TRUE, if the statement is true
FALSE, if the statement is false
NOT GIVEN, if the information is not given in the passage.

- 31. Synthetic perfumes outweigh natural counterparts in all aspects.
- 32. The fragrance of jasmine can he extracted by employing the method of steam distillation.
- 33. Nowadays, the biggest industry of Madagascar is perfumery.
- 34. The original Latinal meaning of perfume is the scent smoke.

Questions 35-39

Use the information in the passage to match the essential oils listed (A - F) with their Purposes.

Write the appropriate letter (A— F) in boxes 34- 39 on your answer sheet.

- A. Katralay
- B. Clove bud oil
- C. Ylang-ylang
- D. Cinnamon
- E. Lantana caniara
- F. Ginger oil
- 35. used as postpartum tonic
- 36. used as medicine for influenza
- 37. used as medicine for diabetes
- 38. used as medicine for nausea
- 39. used as anesthetic medicine

Question 40

List three kinds of protected animals whose oils are highly valued. Write NO M	10RE
THAN THREE WORDS for each blank.	
	
	

SECTION 1

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

COASTLINE DANGER

A.

On July 1, 1998, an unexpected tsunami pounded the northern coastline of Papua New Guinea. In three massive waves, as high as 15 meters, it washed away entire villages, drowned over 2500 people and left thousands homeless. Survivors of the Papua New Guinea disaster described the tsunami as a wall of water hurling toward shore, averaging 10 meters high and extending about 5 kilometres from front to back. The largest wave swept over the shore at speeds of up to 20 kilometres per hour for more than a minute, before draining away in preparation for the next.

В.

What are tsunamis? Tsunamis are enormous waves initiated by sudden seismic events. A tsunami is generated when a large mass of water is displaced suddenly, creating a swell that moves away from its origin. The effect is similar to the ripples that form when a pebble is

dropped into a pond-but a thousand times larger. A tsunami wave can be 100 to 200 kilometres wide and long. It can reach speeds of 725 to 800 km/hour. It can travel thousands of kilometres across the ocean and maintain a barely not likeable height of less than a half meter. However, as the tsunami enters the shallow waters of a coastline, it bunches up into a monstrous wall of seawater that can reach heights of 30 meters and still be many kilometres in length.

C.

The impact of such large waves on a shoreline can be devastating. Buildings, bridges, and can be devastating. Buildings, bridges, and other structures may be destroyed. Extensive beach erosion commonly occurs. In addition, water may flood areas hundreds of meters inland. The amount of damage depends on the geometry of the coastline as well as the size of the tsunami. Because variations in the shapes of coastal areas can focus or diffuse the energy in a wave, different parts of a coastline may experience very different degrees of damage from a given tsunami. The largest waves, hence the greatest amount of damage, are generally observed in embayment that funnel the waves into a narrow bay.

D.

Tsunamis are frequently caused by underwater earthquakes with a magnitude greater than 7 on the Richter scale. The most dangerous tsunamis are triggered by quakes with a shallow focus that produce extended vibrations and shift the seafloor vertically. Tsunamis are sometimes generated by other catastrophic events, such as underwater volcanic explosions. For example, the disastrous eruption of Krakatau that killed more

than 30,000 people in 1883 produced waves that were 35 meters high and that travelled thousands of kilometres. Although scientists are not certain exactly how this eruption led to a tsunami, a recent study of sea-floor deposits suggests that water displaced by immense ash flows was the cause. Underwater landslides have also been known to create tsunamis. For instance, the Hawaiian Islands have all experienced enormous landslides in the past, and coastal sediments record evidence of tsunamis that were generated from them.

E.

The exact trigger of the Papua New Guinea tsunami is not yet known, although an earthquake was certainly involved. Because the earthquake was relatively small, scientists were somewhat surprised by the disastrous results. One study of seismic data indicated that the earthquake was centred offshore and produced a 2-meter vertical displacement of the seafloor; the conclusion was that this abrupt motion triggered the tsunami. Other evidence indicates that the tsunami was produced by a huge offshore landslide, itself triggered by the earthquake. Eyewitness accounts indicate that the first wave struck shore about 20 minutes after the mainshock of the earthquake, too long for the tsunami to have originated from sub-sea faulting during the quake. A slump or landslide typically lags several minutes behind an earthquake and could explain the delay. Further support comes from a 70-seconds long rumble recorded in the middle of the Pacific soon after the earthquake. This sound lasted too long to have come from a small aftershock and may have represented a seafloor slide.

F.

Unfortunately, tsunamis cannot be stopped or prevented. However, effective warning systems might save hundreds of lives. In the United States, the National Tsunami Hazard Mitigation Program has been developed to reduce the impacts of tsunamis along the U.S. Pacific Coast. One goal of this program is to improve the tsunami warning systems. Components of such systems include seismic sensors that warn of large earthquakes and oceanic sensors that detect tsunamis crossing the ocean. Destructive tsunamis need to be detected quickly so that warnings can be issued to allow the orderly evacuation of coastal communities in the path of the waves. Of course, evacuation can only save lives if the tsunami is triggered far enough away to give advanced warning.

Questions 1-4

Reading Passage 1 has six paragraphs, labelled A-F.

Answer questions and write the appropriate letter; A-F, in boxes on your answer sheet.

- 1. Which paragraph explains the measures that have been taken to reduce the impact of tsunamis along the U.S. Pacific coast?
- 2. Which paragraph discusses the probable cause of the Papua New Guinea tsunami? Write the name and the year in the box on your answer sheet.
- 3. On what island and in what year was a tsunami triggered by a volcanic eruption that killed 30,000 people?

Using NO MORE THAN THREE WORDS, write your answer in the box on your answer sheet.

4. Tsunamis are frequently caused by underwater earthquakes with a magnitude greater than 7, as indicated on what scale?

Questions 5-6

Complete the summary below about the tsunami that hit Papua New Guinea. Choose NO MORE THAN TWO WORDS from the passage for each answer:

On July 1, 1998, an unexpected tsunami5 the northern coast of Papua New
Guinea. In three massive waves, as high as 15 meters, it6 entire villages,
drowned over 2500 and left thousands homeless. Survivors of the Papua New Guinea
disaster described the tsunami as a wall of water7 shore, averaging 10 meters
high and extending about 5 kilometres from front to back. The largest wave8 the
shore at speeds of up to 20 kilometres per hour for more than a minute, before draining
away in preparation for the next.

Questions 9-10

Complete the table below which describes the power of a tsunami. Using NO MORE THAN THREE WORDS.

<u>Physical</u> <u>Characteristic</u>	Measurement
Example	Answer
The width and length of a	100 - 200
tsunami can be	kilometers
It can reach speeds of	9 kilometers/hour
It can cover vast distances equal to	10

Question 11

Choose the appropriate letter, A-D, and write it on your answer sheet.

11. According to the text, tsunamis generally cause the greatest amount of observable damage ____

A. in unpaved areas.

B. in wide and flat areas.

C. in embayments.

D. in sandy beach areas.

SECTION 2

You should spend about 20 minutes on Questions 12-25 which are based on Reading Passage 2.

MEASURING HUMAN BEHAVIOUR

A.

Psychological Testing is the measurement of some aspect of human behavior by procedures consisting of carefully prescribed content, methods of administration, and interpretation. The test may address any aspect of intellectual or emotional functioning, including personality traits, attitudes, intelligence, or emotional concerns. Interpretation is based on a comparison of the individual's responses with those previously obtained to establish appropriate standards for the test scores. The usefulness of psychological tests depends on their accuracy in predicting behavior. By providing information about the probability person's responses or performance, tests aid making a variety of decisions.

В.

The primary drive behind the development of the major tests used today was the need for practical guidelines for solving social problems. The first useful intelligence test was prepared in 1905 by the French psychologists Alfred Binet and Theodore Simon. The two developed a 30- item scale to ensure that no child could be denied instruction in the Paris school system without formal examination. In 1916, the American psychologist Lewis Terman produced the first Stanford Revision of the Binet-Simon scale to provide comparison standards for Americans from age three to adulthood. The test was further revised in 1937 and 1960, and today the Stanford Binet remains one of the most widely used intelligence tests.

C.

The need to classify soldiers during World War I resulted in the development of two group intelligence tests - Army Alpha and Army Beta. To help detect soldiers who might break down in combat, the American psychologist Robert Woodworth designed the Personal Data Sheet, a forerunner of the modern personality inventory. During the 1930s controversies over the nature of intelligence led to the development of the Wechsler-Bellevue Intelligence Scale, which not only provided an index of general mental ability but also revealed patterns of intellectual strengths and weaknesses. The Wechsler tests now extend from the preschool through the adult age range and are at least as prominent as the Stanford-Binet.

D.

As interest in the newly emerging field of psychoanalysis grew in the 1930s, two important projective techniques introduced systematic ways to study unconscious motivation: the Rorschach or Inkblot test developed by the Swiss psychiatrist Hermann

Rorschach-using a series of inkblots on cards, and a story-telling procedure called the Thematic Apperception Test developed by the American psychologists Henry A. Murray and C. D. Morgan. Both of these tests are frequently included in contemporary personality assessment.

E.

In educational settings, intelligence and achievement tests are administered routinely to assess individual accomplishment and to improve instruction and curriculum planning. Elementary schools use kindergarten and first grade screening procedures to determine readiness for reading and writing programs. Screening tests also identify developmental, visual, and auditory problems for which the child may need special assistance. If the child's progress in school is unusually slow, or if he or she shows signs of a learning disability or behavior disorder, testing may clarify whether the difficulty is neurologically or emotionally based. Many high schools administer interest inventories and aptitude tests to assist in the students' educational or vocational planning.

F.

In clinics or hospitals, psychological tests may be administered for purposes of diagnosis and treatment planning. Clinical tests can provide information about overall personality functioning and the need for psychotherapy; testing also may focus on some specific question, such as the presence or absence of organically based brain disorder. Clinical testing usually involves a battery of tests, interpreted as a whole, to describe intellectual and emotional states. Decisions about treatment do not depend exclusively on psychological test results but are exclusively on psychological test results but are based on the judgment of relevant staff members with whom the psychologist collaborates.

G.

Tests are also used in industrial and organizational settings, primarily for selection and classification. Selection procedures provide guidelines for accepting or rejecting candidates for jobs. Classification procedures, which are more complex, aim to specify the types of positions for which an individual seems best suited. Intelligence testing is usually supplemented by methods devised expressly to meet the needs of the organization.

Н.

The major psychological testing controversies stem from two interrelated issues: technical shortcomings in test design and ethical problems in interpretation and application of results. Some technical weaknesses exist in all tests. Because of this, it is crucial that results be viewed as only one kind of information about any individual.

Questions 12-16

Reading Passage 2 has eight paragraphs, A-H. Choose the most suitable headings for

paragraphs B, D and F-H from the list of headings below. Write the appropriate number i-x, in boxes on your answer sheet.

NB: There are more headings than paragraphs, so you will not use them all.

List of Headings

i Present Criticisms of Testing

ii What is Psychological Testing?

lii Obtaining Information for Clinical Purposes

iv Inkblots and Story-telling

v The First Intelligence Test

vi Employment Testing

vii Expansion during WWII

viii Current Accord on the Validity of Testing

ix Utilization in Academic Settings

x Progress Sparked by WWI

Example Answer

Paragraph C x

- 12. Paragraph B
- 13. Paragraph D
- 14. Paragraph F
- 15. Paragraph G
- 16. Paragraph H

Questions 17-22

Do the following statements agree with the views of the writer in Reading Passage 2? In boxes 17-22 on your answer sheet, write

YES, if the statement agrees with the writer

NO, if the statement does not agree with the writer

NOT GIVEN, if there is no information about this in the passage

- 17. The first useful intelligence test was prepared in 1905 by Alfred Binet and Theodore Simon.
- 18. The Stanford-Binet intelligence test is comprised of multiple-choice questions
- 19. During WW I, psychologist Robert Woodworth designed the Personal Data Sheet to help detect soldiers who had an especially high level of intelligence.
- 20. The Wechsler tests are not nearly as prominent as the Stanford-Binet tests
- 21. Swiss psychiatrist Hermann Rorschach invented a story-telling procedure called the Thematic Apperception Test.
- 22. Most criticisms of testing arise from the over-valuation of and inappropriate reliance on test results in making major life decisions, especially in the case of intelligence testing.

Questions 23-25

Complete the notes below with words taken from Reading Passage 2. Use NO MORE THAN ONE OR TWO WORDS for each answer. Write your answers in boxes 23-25 on your answer sheet.

Present-day	uses of	Psycho	logica	Test	ing
-------------	---------	--------	--------	------	-----

- i. Educational settings
- A. to assess individual accomplishment
- B. to improve instruction and ____23__
- C. to identify individual learning problems and their causes
- D. to assist students with educational or vocational planning
- ii. Clinics or hospitals
- A. to assist with ____24___ and treatment planning
- B. to assess overall personality functioning
- C. to detect organic brain disorders
- iii. Industrial and organizational settings
- A. to determine the acceptance or rejection of job candidates
- B. to specify the positions for which an individual seems ___25___

SECTION 3

You should spend about 20 minutes on Questions 26-38, which are based on Reading

UNDERWATER BOATS

A.

Efforts to build underwater boats began in Europe over 500 years ago. Although the technology was not advanced enough to create a successful submarine, several attempts were made with varying degrees of success. In 1578, English scientist William Bourne wrote of the possible use of ballast tanks (hollow tanks that possible use of ballast tanks (hollow tanks that can be filled with seawater) to enable a submersible boat to descend and rise to the surface, though he never built one himself. In 1620, Cornelis Drebbel, a Dutch inventor, created several prototype submersibles resembling two wooden rowboats, one atop the other and bound with leather for a watertight skin. These were propelled by oars that emerged from the hull through watertight openings. Drebbel tested his crafts several times below the Thames River in London, England. Historians consider Drebbel's tests the first practical use of a maneuverable submarine.

В.

For the next two centuries, scientists and inventors in America, England, France, Germany, and Italy attempted to create a true submersible warship with little success. In 1776, American inventor David Bushnell designed the Turtle for use against the British ships that were blockading New York. The Turtle was an egg-shaped craft, slightly larger than an adult man, constructed of wood and designed to briefly submerged under an anchored enemy ship. Its one-man crew could propel the craft by vigorously cranking a hand-turned propeller. The boat's weapon was an explosive charge that could be screwed into the underside of the target ship's wooden hull. However, the one and only attempt to use Bushnell's craft failed when its pilot discovered that the British ships had copper-plated hulls.

C.

In 1800, American inventor Robert Fulton built a 6.4-meter submarine named the Nautilus, which was similar in shape to the modem submarine. Fulton introduced two important innovations: rudders for vertical and horizontal control and compressed air as an underwater supply of oxygen. When submerged, the Nautilus was powered by a hand-operated, four-blade propeller. On the surface, the boat was propelled by means of sails attached to a folding mast.

D.

During the latter half of the 19th century, many attempts were made to develop an adequate means of submarine propulsion. Inventors experimented with compressed air, steam, and electricity as power sources. In 1898, American inventor John Philip Holland used a dual propulsion system to develop the first practical submarine with an efficient source of power. His submarine was equipped with a gasoline engine for surface cruising and an electric motor for underwater power. In 1900, the U.S. government purchased

the 16.2-meter submarine and named it the USS Holland.

E.

At the outbreak of World War I in 1914, submarine technology had evolved to the point that the United States, the United Kingdom, Germany and Russia had all developed diesel-powered submarines that could operate on electrical batteries underwater. The German Uboat was the most advanced. With an average of only 30 submarines at sea at any one time, the German U-boat service put a stranglehold on wartime shipping and merchant supply lines and nearly brought the United Kingdom to its knees in four years of conflict.

F.

During World War II, Germany continued to develop superior U-boats. The Germans invented the snorkel, a retractable tube that could be extended above the surface of the water to capture air and to release exhaust while the submarine continues to operate unseen 18 meters below the surface. They also created streamlined hull designs and larger electric batteries to enable their submarines to travel at much higher speeds and for longer distances. After Germany surrendered in 1945, both the U.S. and Soviet navies benefited from Germany's advanced submarine technology. Postwar diesel-electric submarines made the Go to Questions 26 27 28 29 30 31 32 33 34 35 36 37 38 Postwar diesel-electric submarines made the most of these innovations, and underwater manoeuvrability and speed increased.

G.

The nuclear age began in the 1950s and it led to the development of nuclear reactor power in submarines to increase range and capability. The first nuclear-powered submarine, the USS Nautilus, was developed by the Americans and launched in 1954. In a trial run conducted in 1955, the Nautilus sailed totally submerged for an incredible distance of 2170 km in 84 hours. Its underwater cruising speed was more than 20 knots, and since the sub was nuclear-powered, it no longer needed to periodically surface for air or for refuelling.

Н.

During the 1990s, the U.S. Navy began allowing some of its submarines to be used for scientific missions. In 1995, for example, the U.S. Navy allowed civilian scientists to conduct missions below the polar ice caps aboard Sturgeon-class attack submarines. The agreement provided for one mission a year for five years. Access to this underwater region had been restricted for years due to the harshness of the environment.

Questions 26-29

Do the following statements agree with the views of the writer in Reading Passage 3? In boxes 26-29 on your answer sheet, write;

YES, if the statement agrees with the writer NO, if the statement does not agree with the writer

NOT GIVEN, if there is no information about this in the passage

- 26. William Bourne built the first practical and manoeuvrable submarine.
- 27. Robert Fulton pioneered two important submarine innovations: rudders and submarine innovations: rudders and compressed air.
- 28. John Philip Holland developed the first submarine with an efficient source of power.
- 29. Germany 's U-boats destroyed more ships than any other submarine during World War II.

Questions 30-34

Choose the appropriate letter, A-D, and write them in boxes 30-34 on your answer sheet.

- 30. In 1995, the U.S. Navy allowed some of its Sturgeon-class attack submarines
- A. to be put on display in Germany as part of an international U-boat show.
- B. to be sold to the general public as research vessels.
- C. to be used by civilian scientists to conduct missions below the polar ice caps.
- D. to be fitted with an advanced prototype hydrogen-based engine.
- 31. During World War II, Germany invented the snorkel, a retractable tube that _____ A. launched torpedoes with greater accuracy.
- B. was extended above the water to capture air and to release the exhaust.
- C. was used to receive fuel from surface ships while still hidden underwater.
- D. was used to plant explosives on the hulls of enemy ships.
- 32. In 1898, American inventor John Philip Holland developed a submarine with ____
- A. a hand-operated propeller for underwater power and sails for surface cruising.
- B. a diesel engine capable of cruising at a speed of 20 kilometres per hour.
- C. an electric motor for surface cruising and a gasoline engine for underwater power.
- D. a gasoline engine for surface cruising and an electric motor for underwater power.
- 33. In 1620, Dutchman Cornelis Drebbel created several submersibles
- A. that resembled two wooden rowboats, one atop the other and bound with leather.
- B. that were used against the British ships that were blockading New York.
- C. that were used to conduct scientific missions below the polar ice caps.
- D. that were equipped with rudders for control and compressed air for oxygen.
- 34. During World War I, which country's submarines put a stranglehold on wartime shipping and merchant supply lines, nearly bringing the United Kingdom to its knees? A. United States.
- B. Italy.
- C. Germany.
- D. Russia.

Complete the table below. Choose NO MORE THAN TWO WORDS from the passage for each answer. Write your answers in boxes on your answer sheet.

Year	Development	Name of Person or People
1578	35	William Bourne
1776	The Turtle	36

37	First Nuclear-powered Submarine launch	The Americans
World War	The Snorkel	38



1	YES	2	YES	3	NOT GIVEN
4	NO	5	YES	6	С
7	D	8	В	9	D
10	A	11	В	12	С
13	A				
14	н	15	J	16	
					l
17	K	18	G	19	NOT GIVEN
20	TRUE	21	TRUE	22	FALSE
23	FALSE	24	In the 1960s	25	Tanzania
26	Close observation	27	Cultural origin		
28	7	29	5	30	8
31	3	32	С	33	В
34	A	35	В	36	D
37	Without leather	38	Boots	39	Very quiet
40	sports				

1	E	2	С	3	F
4	D	5	F	6	В
7	17 years	8	Backpack	9	Interact with
10	Facial expressions	11	Cognition	12	Sensors
13	Intelligence				
14	Annual costs	15	Turnover costs	16	Plan
17	Guest satisfaction	18	Savings	19	NOT GIVEN
20	YES	21	YES	22	A
23	D	24	E	25	Н
26	J				
27	NO	28	NOT GIVEN	29	YES
30	NOT GIVEN	31	YES	32	NO
33	A	34	С	35	D
36	D	37	Α	38	Н
39	E	40	В		

1	D	2	G	3	В
4	A	5	F	6	10 -minute
7	complex	8	rats	9	TRUE
10	FALSE	11	FALSE	12	NOT GIVEN
13	TRUE				
14	A	15	A	16	D
17	YES	18	NOT GIVEN	19	NOT GIVEN
20	YES	21	NO	22	A
23	В	24	С	25	A
26	С				
27	Varying rates	28	intensify	29	initiate
30	aridity	31	vegetation	32	soils
33	G	34	E	35	D
36	В	37	E	38	G
39	С	40	A		

1	V	2	li	3	lii
4	lx	5	Vi	6	С
7	В	8	D	9	E
10	NOT GIVEN	11	FALSE	12	TRUE
13	FALSE	14	TRUE		
15	NOT GIVEN	16	FALSE	17	TRUE
18	TRUE	19	TRUE	20	FALSE
21	Phonetic	22	Detrimental	23	Mess up
24	D	25	С	26	A
27	В				
28	Enfleurage pomade	29	Ethyl Alcohol	30	The essential oil
31	FALSE	32	FALSE	33	NOT GIVEN
34	FALSE	35	A	36	E
37	D	38	F	39	В
40	Beavers/civet cats/sperm whale/musk deer (only three needed			V	

1	F	2	E	3	Krakatau,1883
	(a/the) Richter scale	5	Pounded	6	Washed away
7	Hurling toward	8	Swept over	9	725-800
10	Thousands of kilometers	11	С	12	V
13	lv	14	lii		
15	Vi	16	I	17	YES
18	NOT GIVEN	19	NO	20	NO
2	NO	22	YES	63	Curriculum planning
(m)	Diagnosis	25	Best suited	26	NO
27	YES				:
28	YES	29	NOT GIVEN	30	С
31	В	32	D	33	A
34	С	35	Ballast Tanks	36	David Bushnell
37	1954	38	Germany or The Germans		C Na