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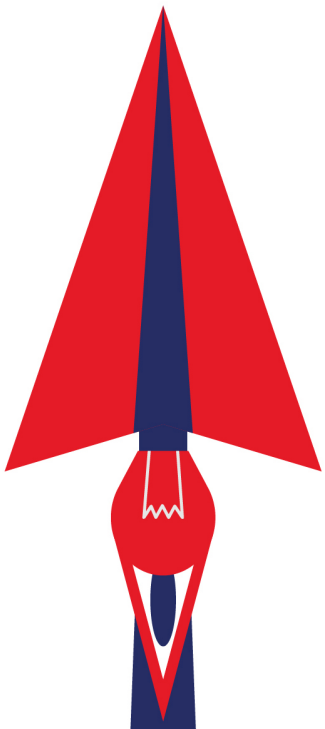

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READING PASSAGE 1418s1

You should spend about 20 minutes on Question 1–13,which are based on Reading Passage 1 on the following pages.

Agriculture and Tourism

A Linkages between the Agri-Food Sector and Tourism offer significant opportunities for the development of both sectors within the region. These linkages could lead to ensuring the sustainability of the region' s tourism product thus ensuring it preservation. Agriculture and tourism---- two of Wisconsin' s most industries--- are teaming up in southwestern Wisconsin. A pilot project has found that tourists, rural communities, and some farmers could benefit from stronger efforts to promote and market agricultural tourism there. In 1990, agricultural tourism project members surveyed 290 visitors to the annual Monroe Cheese Festival and 164 visitors to the Picnic on the Farm, a one-time event held in Platteville in conjunction with the Chicago Bears summer training camp. More than one half of those surveyed responded favorably to a proposed tour, saying they would be interested in participating in some type of agricultural tour in southwestern Wisconsin. Survey respondents reported that they would prefer to visit factories, sausage processing plants, dairy farms, and historical farm sites, as well as enjoy an old-fashioned picnic dinner. The study also found that Cheese Day visitors showed strong interest in visiting specialty farms (strawberries, cranberries, poultry, etc.) More than 75 percent of the Cheese Day visitors planned ahead for the trip, with 37 percent planning at least two months in advance.

B More than 40 percent of the visitors came to Monroe for two- or three-day visits. Many stopped at other communities on their way to Cheese Days. Visitors at both event indicated that they were there to enjoy themselves and were willing to spend money on food and arts and crafts. They also wanted the opportunity to experience the "country" while there. The study found that planning around existing events should take into account what brought visitors to the area and provide additional attractions that will appeal to them. For example, visitors to Cheese Days said they were on a holiday and appeared to be more open to various tour proposals. Picnic visitors came specially to see the Chicago Bears practice. They showed less interest in a proposed agricultural tour than Cheese Day visitors, but more interest in a picnic dinner and viewing sports event.

C The study identified three primary audiences for agricultural tourism: 1) elderly people who take bus tours to see the country; 2) families interested in tours that could be enjoyed by both parents and children; and 3) persons already involved in agriculture, including international visitors. Agricultural tourism can serve to educate urban tourists about the problems and challenges facing farmers, says Andy Lewis, Grant country community development agent. While agriculture is vital to Wisconsin, more and more urban folk are becoming isolated from the industry. In fact, Lewis notes, farmers are just as interested in the educational aspects of agricultural tours as they are in any financial returns.

D "Farmers feel that urban consumers are out of touch with farming," Lewis says. " If tourists can be educated on issues that concern farmers, those visits could lead to policies more favorable to agriculture." Animal rights and the environment are examples of two issues that concern both urban consumers and farmers. Farm tours could help consumers get the farmer' s perspective on these issues, Lewis notes. Several Wisconsin farms already offer some type of learning experience for tourists. However, most agricultural tourism enterprises currently market their businesses independently, leading to a lack of a cooperation to promote agricultural tourism as an industry.

E Lewis is conducting the study with Jean Murphy, assistant community development agent. Other participants include UW-Platteville Agricultural Economist Bob Acton, the Center for Integrated Agricultural Systems, UW-Extension Recreation Resources Center, the Wisconsin Rural Development Center, and Hidden Valleys, a Southwestern Wisconsin regional tourism organization. This past fall, Murphy organized several workshops with some Green and Grant Country farmers, local business leaders, and motor coach tour operators to discuss how best to organize and put on farm tours. Committees were formed to look at the following; tour site evaluations, inventory of the area' s resources, tour marketing, and familiarization of tours. The fourth committee is resources, tour marketing, and familiarization of tours. The fourth committee is organizing tours for people such as tour bus guides and local reporters to help better educate them about agricultural tourism. Green County farmers already have experience hosting visitors during the annual Monroe Cheese Days. Green County Tourism Director Larry Lindgren says these farmers are set to go ahead with more formal agricultural tours next year. The tour will combine a farm visit with a visit to a local cheese factory and a picnic lunch.

F Another farm interested in hosting an organized tour is Sinsinawa, a 200-acre Grant County Farm devoted to sustainable agriculture and run by the Dominican Sister, Education plays a major role at the farm, which has an orchard, diary and beef cows, and hogs. Farm tours could be combined with other activities in the area such as trips to the Mississippi River and/or visits to historical towns or landmarks, Lewis say. The project will help expose farmers to the tourism industry and farm vacation as a way to possibly supplement incomes, he adds. While farm families probably wouldn' t make a lot of money through farm tours, they would be compensated for their time, says Lewis. Farmers could earn additional income through the sale of farm products, crafts, and recreational activities.

Question 1-5

Classify the following visitors according to the passage states

A Cheese festival visitors

B picnic visitors

C Both

Write the correct letter A, B or C in boxes 1-5 on your answer sheet

1 Who would prepare the trip several weeks in advance?

2 who are keened to watch sports activity?

3 who would spend two to three days on their trip?

4 who would like to stay in rural area?

5 who are willing to accept a variety of tour recommendation?

Questions 6-7

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

Write the correct letter in boxes 6-7 on your answer sheet.

6 who should be taught to take care of animal rights?

A Wisconsin authorities

B farmers and Urbanian

C tourists

D local business

7 What would farmers do to make extra income in Sinsinawa?

A expand their farming area

B apply government' s subsidy

C organize tour in for Dominican Sister

D Marketing local goods and service

Questions 8-13

Complete the summary below.

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

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

A pilot project found a combination of targeted group and individuals would ____8____them all. Then in 1990, a ____9_____conducted in visitors to the annual festival. After found series of findings, this study classified ____10____ types of tourists for agricultural tourism. However, majority of local companies are short of ____11_____ to develop agricultural tourism as a whole. Inspiringly, Farmers in Green County have gained ____12____ of receiving tourists in Monroe Cheese Day, therefore they are ready to hold next agricultural tour confidently. In Sinsinawa, similar project allows farmers to achieve extra ____13____through related services.

READING PASSAGE 1429s2

You should spend about 20 minutes on Question 14–27, which are based on Reading Passage 2 on the following pages.

Malaria in Italy

A Everybody now knows that malaria is carried by mosquitoes. But in the 19th century, most experts believed that the disease was produced by "miasma" or "unclean air". Others made a link between swamps, water and malaria, but did not make the further leap towards insects. The consequences of these theories were that little was done to combat the disease before the end of the century. Things became so bad that 11m Italians (from a total population of 25m) were "permanently at risk". In malarial zones the life expectancy of land workers was a terrifying 22.5 years. Those who escaped death were weakened or suffered from splenomegaly – a "painful enlargement of the spleen'" and "a lifeless stare". The economic impact of the disease was immense. Epidemics were blamed on southern Italians, given the widespread belief that malaria was hereditary. In the 1880s, such theories began to collapse as the dreaded mosquito was identified as the real culprit.

B Italian scientists, drawing on the pioneering work of French doctor Alphonse Laveran, were able to predict the cycles of fever but it was in Rome that further key discoveries were made. Giovanni Battista Grassi, a naturalist, found that a particular type of mosquito was the carrier of malaria. By experimenting on healthy volunteers (mosquitoes were released into rooms where they drank the blood of the human guinea pigs), Grassi was able to make the direct link between the insects (all females of a certain kind) and the disease. Soon, doctors and scientists made another startling discovery: the mosquitoes themselves were also infected and not mere carriers. Every year, during the mosquito season, malarial blood was moved around the population by the insects. Definitive proof of these new theories was obtained after an extraordinary series of experiments in Italy, where healthy people were introduced into malarial zones but kept free of mosquito bites – and remained well. The new Italian state had the necessary information to tackle the disease.

C A complicated approach was adopted, which made use of quinine – a drug obtained from tree bark which had long been used to combat fever, but was now seen as a crucial part of the war on malaria. Italy introduced a quinine law and a

quinine tax in 1904, and the drug was administered to large numbers of rural workers. Despite its often terrible side-effects (the headaches produced were known as the "quinine-buzz") the drug was successful in limiting the spread of the disease, and in breaking cycles of infection. In addition, Italy set up rural health centres and invested heavily in education programmes. Malaria, as Snowden shows, was not just a medical problem, but a social and regional issue, and could only be defeated through multi-layered strategies. Politics was itself transformed by the anti- malarial campaigns.

D It was originally decided to give quinine to all those in certain regions – even healthy people; peasants were often suspicious of medicine being forced upon them. Doctors were sometimes met with hostility and refusal, and many were dubbed "poisoners". Despite these problems, the strategy was hugely successful. Deaths from malaria fell by some 80% in the first decade of the 20th century and some areas escaped altogether from the scourge of the disease.

E Shamefully, the Italian malaria expert Alberto Missiroli had a role to play in the disaster: he did not distribute quinine, despite being well aware of the epidemic to come. Snowden claims that Missiroli was already preparing a new strategy – with the support of the US Rockefeller Foundation – using a new pesticide, DDT. Missiroli allowed the epidemic to spread, in order to create the ideal conditions for a massive, and lucrative, human experiment. Fifty-five thousand cases of malaria were recorded in the province of Littoria alone in 1944. It is estimated that more than a third of those in the affected area contracted the disease. Thousands, nobody knows how many, died.

F With the war over, the US government and the Rockefeller Foundation were free to experiment. DDT was sprayed from the air and 3m Italians had their bodies covered with the chemical. The effects were dramatic, and nobody really cared about the toxic effects of the chemical. By 1962, malaria was more or less gone from the whole peninsula. The last cases were noted in a poor region of Sicily. One of the final victims to die of the disease in Italy was the popular cyclist, Fausto Coppi. He had contracted malaria in Africa in 1960, and the failure of doctors in the north of Italy to spot the disease was a sign of the times. A few decades earlier, they would have immediately noticed the tell-tale signs; it was later claimed that a small dose of quinine would have saved his life.

G As there are still more than 1m deaths every year from malaria worldwide, Snowden's book also has contemporary relevance. This is a disease that affects every level of the societies where it is rampant. As Snowden writes: "In Italy malaria undermined agricultural productivity, decimated the army, destroyed communities and left families impoverished." The economic miracle of the 50s and 60s which made Italy into a modern industrial nation would not have been possible without the eradication of malaria. Moreover, this book convincingly argues that the disease was "an integral part of the big picture of modern Italian history". This magnificent study, beautifully written and impeccably documented, deserves an audience beyond specialists in history, or in Italy. It also provides us with "a message of hope for a world struggling with the great present-day medical emergency".

Questions 14–17

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 answer in boxes 14–17 on your answer sheet.

Malaria was a key issue for medical expert in the past. it is well-acknowledged that there are potential link with mosquitoes and 14_____. In 19 century majority of expert did not realize that 15_____ wasn' t the real cause. In Italy, the 16_____of people from infected zone was as low as 22.5 years. It was even once attributed to the southern Italians, claimed that malaria was 17_____. All above hypothesis were denied finally and real cause emerged.

Questions 18–21

Do the following statements agree with the claims of the writer in Reading Passage?
In boxes 18–21 on your answer sheet write.

YES if the statement agrees with the information
NO if the statement contradicts the information
NOT GIVEN if there is no information on this

18 Wrong perspectives slowed the development of fighting malaria in the end of 19 century.
19 Volunteers in Grassi experiments were from all parts of the Italy.
20 Mosquitoes were just carriers of Malaria instead of being infected themselves.
21 Fighting malaria was an issue which needs efforts from combined strategies.

Questions 22–27

Reading passage 2 has 7 paragraphs, A–G.
Which paragraph contain the following information?
Write the correct letter A–G in boxes, 22–27 on your answer sheet.

22 A scientist intentionally failed to distribute medicines.
23 This implication of the story for today' s readers.
24 A breakthrough unveiled the secrete of Malaria.
25 Final case reported to die of malaria in Italy.
26 The side-effect of the a highly effective drug .
27 Hypothesis of causes in history were cited .

READING PASSAGE 1331s1

You should spend about 20 minutes on Question 1–13, which are based on Reading Passage 1 on the following pages.

Traditional Farming Practice in Tanzania

A By tradition land in Luapula is not owned by individuals, but as in many other parts of Africa is allocated by the headman or headwoman of a village to people of either sex, according to need. Since land is generally prepared by hand, one ulupwa cannot take on a very large area; in this sense land has not been a limiting resource over large parts of the province. The situation has already changed near the main townships, and there has long been a scarcity of land for cultivation in the Valley. In these areas registered ownership patterns are becoming prevalent.

B Most of the traditional cropping in Luapula, as in the Bemba area to the east,is based on citemene, a system whereby crops are grown on the ashes of tree branches. As a rule, entire trees are not felled, but are pollarded so that they can regenerate. Branches are cut over an area of varying size early in the dry season, and stacked to dry over a rough circle about a fifth to a tenth of the pollarded area. The wood is fired before the rains and in the first year planted with the African cereal finger millet (Eleusine coracana). The grain of this crop is used to brew local beers such as cipumu, which contribute several vitamins of the B complex to peoples' diet. Cipumu is also used in cementing reciprocal working relationships.

C During the second season, and possibly for a few seasons more the area is planted to variously mixed combinations of annuals such as maize, pumpkins(Telfiria occidentalis) and other cucurbits, sweet potatoes, groundnuts, Phaseolus beans and various leafy vegetables, grown with a certain amount of rotation. The diverse sequence ends with cassava, which is often planted into the developing last-but-one crop as a relay.

D Richards observed that the practice of citemene entails a definite division of labour between men and women. A man stakes out a plot in an unobtrusive manner, since it is considered provocative towards one's neighbours to mark boundaries in an explicit way. The dangerous work of felling branches is the men's province, and involves much pride. Branches are stacked by the women, and fired

by the men. Formerly women and men cooperated in the planting work, but the harvesting was always done by the women. At the beginning of the cycle little weeding is necessary, since the firing of the branches effectively destroys weeds. As the cycle progresses weeds increase and nutrients eventually become depleted to a point where further effort with annual crops is judged to be not worthwhile: at this point the cassava is planted, since it can produce a crop on nearly exhausted soil. Thereafter the plot is abandoned, and a new area pollarded for the next citemene cycle.

E When forest is not available – this is increasingly the case nowadays – various ridging systems are built on small areas, to be planted with combinations of maize, beans, groundnuts and sweet potatoes, usually relayed with cassava. These plots are usually tended by women, and provide subsistence. Where their roots have year-round access to water tables mango, guava and oil-palm trees often grow around houses, particularly in the Valley, forming a traditional agroforestry system. In season some of the fruit is sold by the roadside or in local markets.

F Fishing has long provided a much needed protein supplement to the diet of Luapulans, as well as being the one substantial source of cash. Much fish is dried for sale to areas away from the main waterways. The Mweru and Bangweulu Lake Basins are the main areas of year-round fishing, but the Luapula River is also exploited during the latter part of the dry season. Several previously abundant and desirable species, such as the Luapula salmon or mpumbu (Labeo altivelis) and pale (Sarotherodon machochir) have all but disappeared from Lake Mweru, apparently due to mismanagement .

G Only small numbers of cattle or oxen are kept in the province owing to the prevalence of the tse-tse fly. For the few herds, the dambos provide subsistence grazing during the dry season. The absence of animal draft power greatly limits peoples' ability to plough and cultivate land: a married couple can rarely manage to prepare by hand-hoeing more than two limas. Most people keep freely roaming chickens and goats. These act as a reserve for bartering, but may also be occasionally slaughtered for ceremonies or for entertaining important visitors. These animals are not a regular part of most peoples' diet.

H Citemene has been an ingenious system for providing people with seasonal production of high quality cereals and vegetables in regions of acid, heavily leached soils. Nutritionally, the most serious deficiency was that of protein. This could at times be alleviated when fish was available, provided that cultivators lived near the Valley and could find the means of bartering for dried fish. The citemene/fishing system was well adapted to the ecology of the miombo regions and sustainable for long periods, but only as long as human population densities stayed at low levels.

I Overall, people must learn to intensify and diversify their productive systems while yet ensuring that these systems will remain productive in the future, when even more people will need food. Increasing overall production of food, though a vast challenge in itself, will not be enough, however. At the same time storage and distribution systems must allow everyone access to at least a moderate share of the total.

Questions 1–5

Complete the notes below.
Choose NO MORE THAN TWO WORDS from the Passage for each answer.
Write your answers in boxes 1–5 on your answer sheet.

1 In Luapula land allocation is on the basis of _____.
2 Citemene system provides land with _____of branches where crops are planted.
3 The last planted crop is _____during the second season.
4 Farm work was finished by_____ in harvest time by citemene system.
5 Under suitable conditions, fruit trees are planted near _____.

Questions 6–9

Look at the following descriptions(Question 6–9)and the list of animals below.
Match each description with the correct animal,A–C.
Write the correct letter,A–C,in boxes 6–9 on your answer sheet.
NB You may use any letter more than once.

A Fish
B Oxen
C Goats

6 were used in some special occasions such as celebrations.
7 cannot thrive as being harassed by the pests.
8 were a main part of making profit.
9 were sold to other places.

Questions 10–12

Do the following statements agree with the information given in Reading Passage 1?
In boxes 10–12 on your answer sheet, write

YES if the statement agrees with the information
NO if the statement contradicts the information
NOT GIVEN if there is no information on this

10 Farmers rarely use animals to cultivate land.
11 Local people eat goats on a regular time.
12 Children are taken as a labor force when it is busy time.

Questions 13

Choose the correct letter, A, B, C or D.
Write the correct letter in boxes 13 on your answer sheet.

13 What is author' s opinion towards the practice of citemene?

A It could be modified in the future without any effort.
B It is the most efficient way to local farmers.
C It provides inadequate support to the population.
D It supplies sufficient nutrition to local people.

READING PASSAGE 15230s1

You should spend about 20 minutes on Question 1–14, which are based on Reading Passage 1 on the following pages.

Roller Coaster

A. 600 years ago, roller coaster pioneers never would have imagine the advancements that have been made to create the rollercoasters of today. The tallest and fastest roller coaster in the world is the Kingda Ka, a coaster in New Jersey that launches its passengers from zero to 128 miles per hour in 3.5 seconds. It then heaves its riders skyward at a 90-degree angle until it reaches a height of 456 feet, over one and a half football fields, above the ground, before dropping another 418 feet. With that said, roller coasters are about more than just speed and height, they are about the creativity of the designers that build them, each coaster having its own unique way of producing intense thrills at a lesser risk than the average car ride. Roller coasters have evolved drastically over the years, from their primitive beginnings as Russian ice slides, to the metal monsters of today. Their combination of creativity and structural elements make them one of the purest forms of architecture.

B. At first glance, a roller coaster is something like a passenger train. It consists of a series of connected cars that move on tracks. But unlike a passenger train, a roller coaster has no engine or power source of its own. For most of the ride, the train is moved by gravity and momentum. To build up this momentum, you need to get the train to the top of the first hill or give it a powerful launch. The traditional lifting mechanism is a long length of chain running up the hill under the track. The chain is fastened in a loop, which is wound around a gear at the top of the hill and another one at the bottom of the hill. The gear at the bottom of the hill is turned by a simple motor.This turns the chain loop so that it continually moves up the hill like a long conveyer belt. The coaster cars grip onto the chain with several chain dogs, sturdy hinged hooks. When the train rolls to the bottom of the hill, the dogs catches onto the chain links. Once the chain dog is hooked, the chain simply pulls the train to the top of the hill. At the summit, the chain dog is released and the train starts its descent down the hill.

C. Roller coasters have a long, fascinating history. The direct ancestors of roller coasters were monumental ice slides -- long, steep wooden slides covered in ice,

some as high as 70 feet -- that were popular in Russia in the 16th and 17th centuries. Riders shot down the slope in sleds made out of wood or blocks of ice, crash-landing in a sand pile. Coaster historians diverge on the exact evolution of these ice slides into actual rolling carts. The most widespread account is that a few entrepreneurial Frenchmen imported the ice slide idea to France. The warmer climate of France tended to melt the ice, so the French started building waxed slides instead, eventually adding wheels to the sleds. In 1817, the Russes a Belleville became the first roller coaster where the train was attached to the track . The French continued to expand on this idea, coming up with more complex track layouts, with multiple cars and all sorts of twists and turns.

D. In comparison to the world's first roller coaster, there is perhaps an even greater debate over what was America's first true coaster. Many will say that it is Pennsylvania's own Maunch Chunk-Summit Hill and Switch Back Railroad. The Maunch Chunk-Summit Hill and Switch Back Railroad was originally America's second railroad, and considered my many to be the greatest coaster of all time. Located in the Lehigh valley, it was originally used to transport coal from the top of Mount Pisgah to the bottom of Mount Jefferson, until Josiah White, a mining entrepreneur, had the idea of turning it into a part-time thrill ride. Because of its immediate popularity, it soon became strictly a passenger train. A steam engine would haul passengers to the top of the mountain, before letting them coast back down, with speeds rumored to reach 100 miles per hour! The reason that it was called a switch back railroad, a switch back track was located at the top-where the steam engine would let the riders coast back down. This type of track featured a dead end where the steam engine would detach its cars, allowing riders to coast down backwards. The railway went through a couple of minor track changes and name changes over the years, but managed to last from 1829 to 1937, over 100 years.

E. The coaster craze in America was just starting to build. The creation of the Switch Back Railway, by La Marcus Thompson, gave roller coasters national attention. Originally built at New York's Coney Island in 1884, Switch Back Railways began popping up all over the country. The popularity of these rides may puzzle the modern-day thrill seeker, due to the mild ride they gave in comparison to the modern-day roller coaster. Guests would pay a nickel to wait in line up to five hours just to go down a pair of side-by-side tracks with gradual hills that vehicles coasted down at a top speed around six miles per hour. Regardless, Switchback Railways were very popular, and sparked many people, including Thompson, to design coasters that were bigger and better.

F. The 1910s and 1920s were probably the best decades that the roller coaster has ever seen. The new wave of technology, such as the upstop wheels, an arrangement that kept a coaster's wheels to its tracks by resisted high gravitational forces, showed coasters a realm of possibilities that has never been seen before. In 1919, North America alone had about 1,500 roller coasters, a number that was rising rampantly. Then, the Great Depression gave a crushing blow to amusement parks all over America. As bad as it was, amusement parks had an optimistic look on the future in the late 1930s. But, in 1942, roller coasters could already feel the effects of World War Two, as they were forced into a shadow of neglect. Most, nearly all of America's roller coasters were torn down. To this very day, the number of roller coaster in America is just a very tiny fraction of the amount of roller coasters in the 1920s.

Questions 1–4

Answer the questions below.

Below is a diagram that explains the mechanism and working principles of roller coaster,

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

Questions 5–10

Summary

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 5–10 on your answer sheet.

The first roller coaster was perhaps originated from Russia which is wrapped up by_____5_____. Ice slide was introduced into France, and it was modified to _____6_____, because temperature there would _____7_____the ice. This time ____8_____were installed on the board. In America, the first roller coaster was said to appear in Pennsylvania, it was actually a railroad which was designed to send ____9_____between two mountains. Josiah White turned it into a thrill ride, it was also called switch back track and a _____10_____there allowed riders to slide downward back again.

Questions 11–14

Do the following statements agree with the information given in Reading Passage 1?
In boxes 11–14 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

11The most expensive roller coaster in the world is in New Jersey.
12French added more innovation on Russian ice slide including both cars and tracks.
13Switch Back Railways began to gain popularity since its first construction in New York.
14The Great Depression affected amusement parks severly only in several states of America.

READING PASSAGE 15156s2

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

Monkeys and Forests

A Ken Glander, a primatologist from Duke University, gazes into the canopy, tracking the female' s movements. Holding a dart gun, he waits with infinite patience for the right moment to shoot. With great care, Glander aims and fires. Hit in the rump, the monkey wobbles.

B This howler belongs to a population that has lived for decades at Hacienda La Pacifica, a working cattle ranch in Guanacaste province. Other native primates—white-faced capuchin monkeys and spider monkeys—once were common in this area, too, but vanished after the Pan-American Highway was built nearby in the 1950s. Most of the surrounding land was clear-cut for pasture.

C Howlers persist at La Pacifica, Glander explains, because they are leaf-eaters. They eat fruit .when it' s available but, unlike capuchin and spider monkeys, do not depend on large areas of fruiting trees. "Howlers can survive anyplace you have half a dozen trees, because their eating habits are so flexible," he says. In forests, life is an arms race between trees and the myriad creatures that feed on leaves. Plants have evolved a variety of chemical defenses, ranging from bad-tasting tannins, which bind with plant-produced nutrients, rendering them indigestible, to deadly poisons,such as alkaloids and cyanide.

D All primates, including humans, have some ability to handle plant toxins. "We can detoxify a dangerous poison known as caffeine, which is deadly to a lot of animals," Glander says. For leaf-eaters, long-term exposure to a specific plant toxin can increase their ability to defuse the poison and absorb the leaf nutrients.

E The leaves that grow in regenerating forests, like those at La Pacifica, are actually more howler friendly than those produced by the undisturbed, centuries-old trees that survive farther south, in the Amazon Basin. In younger forests, trees put most of their limited energy into growing wood, leaves and fruit, so they produce much lower levels of toxin than do well-established, old-growth trees.

F The value of maturing forests to primates is a subject of study at Santa Rosa National Park, about 35 miles northwest of Hacienda La Pacifica. The park hosts populations not only of mantled howlers but also of white-faced capuchins and spider monkeys. Yet the forests there are young, most of them less than 50 years old.

G Capuchins were the first to begin using the reborn forests, when the trees were as young as 14 years. Howlers, larger and heavier than capuchins, need somewhat older trees, with limbs that can support their greater body weight. A working ranch at Hacienda La Pacifica also explain their population boom in Santa Rosa. "Howlers are more resilient than capuchins and spider monkeys for several reasons," Fedigan explains. "They can live within a small home range, as long as the trees have the right food for them. Spider monkeys, on the other hand, occupy a huge home range, so they can' t make it in fragmented habitat."

H Howlers also reproduce faster than do other monkey species in the area. Capuchins don' t bear their first young until about 7 years old, and spider monkeys do so even later, but howlers give birth for the first time at about 3.5 years of age. Also, while a female spider monkey will have a baby about once every four years, well-fed howlers can produce an infant every two years.

I The leaves howlers eat hold plenty of water, so the monkeys can survive away from open streams and water holes. This ability gives them a real advantage over capuchin and spider monkeys, which have suffered during the long, ongoing drought in Guanacaste.

J Alejandro Estrada, an ecologist at Estación de Biologia Los Tuxtlas in Veracruz, Mexico, has been exploring how monkeys survive in a landscape increasingly shaped by humans. He and his colleagues recently studied the ecology of a group of mantled howler monkeys that thrive in a habitat completely altered by humans: a cacao plantation in Tabasco, Mexico.

K Estrada believes the monkeys bring underappreciated benefits to such farms, dispersing the seeds of fig and other shade trees and fertilizing the soil with feces. He points out that howler monkeys live in shade coffee and cacao plantations in Nicaragua and Costa Rica as well as in Mexico. Spider monkeys also forage in such plantations, though they need nearby areas of forest to survive in the long term. He hopes that farmers will begin to see the advantages of associating with wild monkeys, which includes potential ecotourism projects. "Conservation is usually viewed as a conflict between agricultural practices and the need to preserve nature," Estrada says. "We' re moving away from that vision and beginning to consider ways in which agricultural activities may become a tool for the conservation of primates in human-modified landscapes."

Questions 14–18

Complete the sentences below.
Choose *NO MORE THAN TWO WORDS* from the passage for each answer.
Write your answers in boxes 14–18 on your answer sheet.

14 Howlers stay in La Pacifica since their diet covers not only _____but also other plants.
15 Leaves that feed animals in forests contain a wide range of dangerous chemical composition including tannins and _____.
16 Leaf-eaters may have a better ability to alleviate the toxin and take in the _____ if they are exposed to certain chemical substance for a long time.
17 The _____ rate of Howlers is relatively higher than that of spider monkeys and capuchin monkeys, which is just 2-4 years.
18 Resistance to continuous _____ in Guanacaste enables Howlers have a better adaptability than other monkey species.

Questions 19–22

Look at the following places and the list of descriptions below.
Match each description with the correct place,A-F.
Write the correct letter A-F,in boxes 19–22 on your answer sheet.

A Hacienda La Pacifica
B Santa Rosa National Park
C Amazon Basin
D Estaci ó n de Biologia Los Tuxtlas in Veracruz, Mexico
E Duke University
F Nicaragua and Costa Rica as well as in Mexico

19 Previous habitat of monkeys was replaced thoroughly by humans.
20 Estrada indicates that farmers need to change their attitude towards monkeys.
21 All three kinds of monkeys are living there as local species.
22 Howler is the only species here.

Questions 23–26

Choose the correct letter,A,B,C or D.
Write the correct letter in boxes 23–26 on your answer sheet.

23 Compared to older forests,what is the advantage of younger forests?
A generate more energy
B produce more nutrition
C release less toxin
D grow more fruits
24 Unlike Howlers,capuchins described in paragraph G
A are larger and heavier
B prefer to live in older forests
C are more likely to have lighter weight
D are more resilient
25 What does Fedigan say about the living patterns of spider monkeys?
A do activities on a large scale
B live within a small home range
C prefer to divide the habitat into small parts
D occupy a limited home area
26 What does Estrada think of the wild monkeys?
A Howler monkeys often forage in large farms
B Coffee and cacao ranch is an ideal place for spider monkeys
C Associating with monkeys may exert potential dangers to local farmers
D Agricultural activities and protection of wildlife can be done simultaneously

The History of Telegraph 15239s1

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 25ft 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, secondly, 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 weighed 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 fishermen 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.South Australia realised it would miss out, and Charles Todd was determined that this should not happen and put in a courageous bid to run an overland telegraph line right across the heart of the Australian continent, a distance of 2,700 miles, through territory which had hardly even been explored.

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 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.

Questions1-5

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

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

1.In 1746,there are about 200 monks holding iron wires in a long line at monastery in Paris.
2.The abbot applied electrical battery to give all the monks a continual electrical shock, which confirmed the long-distance signaling.
3.Morse was an inventor before his creation of Morse code.
4.Skills of Morse code can be grasped easily with simplification.
5.Water is essential to telegragh repeater workers.

Questions 6-13

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 6-13 on your answer sheet.
6.What kind of cables is required to cross the ocean?
7.What was the rubber material dicovered during the first breakthrough?
8.What were electrical properties caught by french fishermen misleaded as?
9.Who received the telegragh message from Queen Victoria ?
10.What is the mistake that increased the speed of sending the 98-word telegragh message?
11. What kind of animals is needed in the drought areas to across the continent?
12. What kind of weather in the North Australia did that the team suffered from?
13. How long did it take to complete the overland line between Australia and England?

READING PASSAGE 15281s3

You should spend about 20 minutes on Question 27–40,which are based on Reading Passage 3 on the following pages.

Mechanisms of linguistic change

A The changes that have caused the most disagreement are those in pronunciation.We have various sources of evidence for the pronunciations of earlier times, such as the spellings, the treatment of words borrowed from other languages or borrowed by them, the descriptions of contemporary grammarians and spelling-reformers, and the modern pronunciations in all the languages and dialects concerned. From the middle of the sixteenth century, there are in England writers who attempt to describe the position of the speech-organs for the production of English phonemes, and who invent what are in effect systems of phonetic symbols. These various kinds of evidence, combined with a knowledge of the mechanisms of speech-production, can often give us a very good idea of the pronunciation of an earlier age, though absolute certainty is never possible.

B When we study the pronunciation of a language over any period of a few generations or more, we find there are always large-scale regularities in the changes: for example, over a certain period of time, just about all the long [a:] vowels in a language may change into long [e:] vowels, or all the [b] consonants in a certain position (for example at the end of a word) may change into [p] consonants. Such regular changes are often called sound laws. There are no universal sound laws (even though sound laws often reflect universal tendencies), but simply particular sound laws for one given language (or dialect) at one given period.

C One cause which has been suggested for changes in pronunciation is geographic and climatic, for example that people living in mountain country are subject to certain changes in pronunciation compared to plainsmen, but the evidence for this is unconvincing. Other people have suggested biological and racial factors: it has been said, for example, that races with thick lips have difficulty in producing certain speech-sounds. Once again, no really convincing evidence has been produced.But in these circumstances the theory is unnecessary: the influence of one language on another is quite enough to explain such changes, without racial characteristics being invoked.

D It is also possible that fashion plays a part in the process of change. It certainly plays a part in the spread of change: one person imitates another,and people with the most prestige are most likely to be imitated, so that a change that takes place in one social group may be imitated (more or less accurately) by speakers in another group. When a social group goes up or down in the world, its pronunciation may gain or lose prestige. It is said that, after the Russian Revolution of 1917, the upper-class pronunciation of Russian, which had formerly been considered desirable, became on the contrary an undesirable kind of accent to have, so that people tried to disguise it. Some of the changes in accepted English pronunciation in the seventeenth and eighteenth centuries have been shown to consist in the replacement of one style of pronunciation by another style already existing, and it is likely that such substitutions were a result of the great social changes of the period: the increased power and wealth of the middle classes, and their steady infiltration upwards into the ranks of the landed gentry, probably carried elements of middle-class pronunciation into upper-class speech.

E A less specific variant of the argument is that the imitation of children is imperfect: they copy their parents' speech, but never reproduce it exactly. This is true, but it is also true that such deviations from adult speech are usually corrected in later childhood. Perhaps it is more significant that even adults show a certain amount of random variation in their pronunciation of a given phoneme, even if the phonetic context is kept unchanged. This, however, cannot explain changes in pronunciation unless it can be shown that there is some systematic trend in the failures of imitation: if they are merely random deviations they will cancel one another out and there will be no net change in the language. For some of these random variations to be selected at the expense of others, there must be further forces at work.

F One such force which is often invoked is the principle of ease, or minimization of effort. The change from fussy to fuzzy would be an example of assimilation, which is a very common kind of change. Assimilation is the changing of a sound under the influence of a neighbouring one. For example, the word scant was once skamt, but the /m/ has been changed to /n/ under the influence of the following /t/. Greater efficiency has hereby been achieved, because /n/ and /t/ are articulated in the same place(with the tip of the tongue against the teeth-ridge), whereas /m/ is articulated elsewhere (with the two lips). So the place of articulation of the nasal consonant has been changed to conform with that of the following plosive. A more recent example of the same kind of thing is the common pronunciation of football as foopball.

G Assimilation is not the only way in which we change our pronunciation in order to increase efficiency. It is very common for consonants to be lost at the end of a word: in Middle English, word-final /-n/ was often lost in unstressed syllables, so that baken 'to bake' changed from /'ba:k□n/ to /'ba:k□/, and later to /ba:k/. Consonant-clusters are often simplified. At one time there was a /t/ in words like castle and Christmas, and an initial /k/ in words like knight and know. Sometimes a whole syllable is dropped out when two successive syllables begin with the same consonant (haplology):a recent example is temporary, which in Britain is often pronounced as if it were tempory.

Questions 27–29

Complete the summary below.
Choose NO MORE THAN THREE WORDS from the passage for each answer
Write your answers in boxes 27–29 on your answer sheet.

The pronunciation of living language undergo changes throughout thousands of years. Changes from [b] consonants to [p] consonants are usually called 27_____. There are three reasons for these changes:Firstly, the influence of one language on another is an adequate explanation since no disagreement being put forward. Secondly, 28_____involving imitation is associated with the spread of this linguistic phenomenon. The incomplete imitations of children, moreover, may also contribute to this change if they are only deviations. However, for those random variations in pronunciation, the deeper evidence lies in the 29_____or minimization of effort.

Questions 30–37

Do the following statements agree with the information given in Reading Passage 3?
In boxes 30–37 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

30 The most controversial aspect of linguistic changes is the use of word.
31 It is possible for us to know the early pronunciation of some certain words.
32 The great change of language is related to the rising status and fortune of middle classes.
33 Some kind of languages change more significantly than other languages.
34 All the children learning speeches from adults cannot have the accurate pronunciation all the time.
35 The word scant can be pronounced more easily than skamt.
36 The [g] in gnat will not be pronounced in the future.
37 The sound of 'temporary' cannot be presented by its spelling.

Questions 38–40

Look at the following sentences and the list of statements below.
Match each statement with the correct sentence,A–D.
Write the correct letter A–D,in boxes 38–40 on your answer sheet.

A Since the speakers can receive less effort
B Due to the pronunciation cannot present the spelling accurately
C It is a language influencing other languages in a large scale
D Because the speaker can pronounce /n/ and /t/ clearly in the same place

38 As a consequence,' b' will be pronounced as 'p'
39 The pronunciation of /m/ changed to /n/
40 The omit of 't' in the sound of Christmas

READING PASSAGE 1334s3

You should spend about 20 minutes on Question 27–40,which are based on Reading Passage 3 on the following pages.

What accounts for knowledge

A What counts as knowledge? What do we mean when we say that we know something?What is the status of different kinds of knowledge?In order to explore these questions we are going to focus on one particular area of knowledge---medicine.

B How do you know when you are ill? This may seem to be an absurd question. You know you are ill because you feel ill; your body tells you that you are ill. You may know that you feel pain or discomfort but knowing you are ill is a bit more complex. At times, people experience the symptoms of illness, but in fact they are simply tried or over-worked or they may just have a hangover. At other times, people may be suffering from a disease and fail to be aware of the illness until it has reached a late stage in its development. So how to we know we are ill, and what counts as knowledge?

C Think about this example. You feel unwell. You have a bad cough and always seem to be tired. Perhaps it could be stress at work, or maybe you should give up smoking. You feel worse. You visit the doctor who listens to your chest and heart, takes your temperature and blood pressure,and then finally pressure, and then finally prescribes antibiotics for your cough.

D Things do not improve but you struggle on thinking you should pull yourself together,perhaps things will ease off at work soon. A return visit to your doctor shocks you. This time the doctor, drawing on years of training and experience, diagnoses pneumonia. This means that you will need bed rest and a considerable time off work. The scenario is transformed. Although you still have the same symptoms, you no longer think that these are caused by pressure at work. You now have proof that you are ill. This is the result of your own subjective experience and the diagnosis of someone who has the status of a medical expert. You have a medically authenticated diagnosis and it appears that you are seriously ill; you know you are ill and have evidence upon which to base this knowledge.

E This scenario shows many different sources of knowledge. For example, you decide to consult the doctor in the first place become you feel unwell---this is personal knowledge about your own body. However, the doctor' s expert diagnosis is based on experience and training, with sources of knowledge as diverse as other experts, laboratory reports, medical textbooks and years of experience.

F One source of knowledge is the experience of our own bodies; the personal knowledge we have of changes that might be significant, as well as the subjective experience of pain and physical distress. These experiences are mediated by other forms of knowledge such as the words we have available to describe our experience and the common sense of our families and friends as well as that drawn form popular culture. Over the past decade, for example, Western culture has been a significant emphasis on stress-related illness in the media. Reference to being stressed out has become a common response in daily exchanges in the workplace and has become part of popular common-sense knowledge. It is thus not surprising that we might seek such an explanation of physical symptoms of discomfort.

G We might also rely on the observations of others who know us. Comments from friends and families such as 'you do look ill' or 'that' s a bad cough' might be another source of knowledge. Complementary health practices, such as holistic medicine, product their own sets of knowledge upon which we might also draw in deciding the nature and degree of our ill health and about possible treatments.

H Perhaps the most influential and authoritative source of knowledge is the medical knowledge provided by the general practitioner. We expect the doctor to have access to expert knowledge. This is socially sanctioned. It would not be acceptable to notify our employer that we simply felt too unwell to turn up for work or that our faith healer, astrologer, therapist or even our priest thought it was not a good idea. We need an expert medical diagnosis in order to obtain the necessary certificate if we need to be of work for more than the statutory self-certification period.

I The knowledge of the medical science is privileged in this respect in contemporary Western culture. Medical practitioners are also seen as having the required expert knowledge that permits them legally to prescribe drugs and treatment to which patients would nor otherwise have access. However there is a range of different knowledge upon which we draw when making decisions about our own state of health.

J However, there is more than existing knowledge in this little story; new knowledge is constructed within it. Given the doctor' s medical training and background, she may hypothesize ' is this new pneumonia?' and then proceed to look for evidence about it. She will use observations and instruments to assess the evidence and-- critically--interpret it in the light of her training and experience. This results in new knowledge and new experience both for you and for the doctor. This will then be added to the doctor' s medical knowledge and may help in future diagnosis of pneumonia.

Question 27-32

Complete the table.
Choose NO MORE THAN THREE WORDS from the passage for each answer.
Writer your answers in boxes 27-32 on your answer sheet.

Source of knowledge	Example
Personal experience	Subjective feeling of a 27 _____and tiredness
Doctor or status of a medical 29_____	Doctors measurement of 28____ and temperature.Credible 30_____ proves that you are ill
Popular culture	People look for 31_____ of symptoms
Comments from 32_____	"look ill" "bad cough"

Question 33-40

The reading Passage has nine paragraphs A-I
Which paragraph contains the following information?
Write the correct letter A-I, in boxes 33-40 on your answer sheet.
NB You may use any letter more than once.

33 The contrast between the personal judgment and the knowledge of doctor.
34 The reference of culture about pressure.
35 A satisfactory and professional diagnosis needed to persuade employer.
36 How doctors are regarded in the society.
37 The symptom of the patients can be added as new information.
38 Situation of encountering non-specialised doctors.
39 An example of collective judgment from personal experience and a doctor.
40 A reference about those people who do not realize their illnes

READING PASSAGE 15233s3

You should spend about 20 minutes on Question 28–40, which are based on Reading Passage 3 on the following pages.

Company Innovation

A IN A scruffy office in midtown Manhattan, a team of 30 artificial-intelligence programmers is trying to simulate the brains of an eminent sexologist, a well-known dietician, a celebrity fitness trainer and several other experts. Umagic Systems is a young firm, setting up websites that will allow clients to consult the virtual versions of these personalities. Subscribers will feed in details about themselves and their goals; Umagic's software will come up with the advice that the star expert would give. Although few people have lost money betting on the neuroses of the American consumer, Umagic's prospects are hard to gauge (in ten years' time, consulting a computer about your sex life might seem natural, or it might seem absurd). But the company and others like it are beginning to spook large American firms, because they see such half-barmy "innovative" ideas as the key to their own future success.

B Innovation has become the buzz-word of American management. Firms have found that most of the things that can be outsourced or re-engineered have been (worryingly, by their competitors as well). The stars of American business tend today to be innovators such as Dell, Amazon and Wal-Mart, which have produced ideas or products that have changed their industries.

C A new book by two consultants from Arthur D. Little records that, over the past 15 years, the top 20% of firms in an annual innovation poll by Fortune magazine have achieved double the shareholder returns of their peers. Much of today's merger boom is driven by a desperate search for new ideas. So is the fortune now spent on licensing and buying others' intellectual property. According to the Pasadena-based Patent & Licence Exchange, trading in intangible assets in the United States has risen from $15 billion in 1990 to $100 billion in 1998, with an increasing proportion of the rewards going to small firms and individuals.

D And therein lies the terror for big companies: that innovation seems to work best outside them. Several big established "ideas factories", including 3M, Procter & Gamble and Rubbermaid, have had dry spells recently. Gillette spent ten years and $1 billion developing its new Mach 3 razor; it took a British supermarket

only a year or so to produce a reasonable imitation. "In the management of creativity, size is your enemy," argues Peter Chernin, who runs the Fox TV and film empire for News Corporation. One person managing 20 movies is never going to be as involved as one doing five movies. He has thus tried to break down the studio into smaller units—even at the risk of incurring higher costs.

E It is easier for ideas to thrive outside big firms these days. In the past, if a clever scientist had an idea he wanted to commercialise, he would take it first to a big company. Now, with plenty of cheap venture capital, he is more likely to set up on his own. Umagic has already raised $5m and is about to raise $25m more. Even in capital-intensive businesses such as pharmaceuticals, entrepreneurs can conduct early-stage research, selling out to the big firms when they reach expensive, risky clinical trials. Around a third of drug firms' total revenue now comes from licensed-in technology.

F Some giants, including General Electric and Cisco, have been remarkably successful at snapping up and integrating scores of small companies. But many others worry about the prices they have to pay and the difficulty in hanging on to the talent that dreamt up the idea. Everybody would like to develop more ideas in-house. Procter & Gamble is now shifting its entire business focus from countries to products; one aim is to get innovations accepted across the company. Elsewhere, the search for innovation has led to a craze for "intrapreneurship" —devolving power and setting up internal ideas-factories and tracking stocks so that talented staff will not leave.

G Some people think that such restructuring is not enough. In a new book Clayton Christensen argues that many things which established firms do well, such as looking after their current customers, can hinder the sort of innovative behaviour needed to deal with disruptive technologies. Hence the fashion for cannibalisation—setting up businesses that will actually fight your existing ones. Bank One, for instance, has established Wingspan, an Internet bank that competes with its real branches (see article). Jack Welch's Internet initiative at General Electric is called "Destroyyourbusiness.com" .

H At Kimberly-Clark, Mr Sanders had to discredit the view that jobs working on new products were for "those who couldn't hack it in the real business." He has tried to change the culture not just by preaching fuzzy concepts but also by introducing hard incentives, such as increasing the rewards for those who come up with successful new ideas and, particularly, not punishing those whose experiments fail. The genesis of one of the firm's current hits, Depend, a more dignified incontinence garment, lay in a previous miss, Kotex Personals, a form of disposable underwear for menstruating women.

I Will all this creative destruction, cannibalisation and culture tweaking make big firms more creative? David Post, the founder of Umagic, is sceptical: "The only successful intrapreneurs are ones who leave and become entrepreneurs." He also recalls with glee the looks of total incomprehension when he tried to hawk his "virtual experts" idea three years ago to the idea labs of firms such as IBM—though, as he cheerfully adds, "of course, they could have been right." Innovation—unlike, apparently, sex, parenting and fitness—is one area where a computer cannot tell you what to do.

Questions 28–33

The reading Passage has ten paragraphs A–I.
Which paragraph contains the following information?
Write the correct letter A–I, in boxes 28–33 on your answer sheet.

NB You may use any letter more than once.

28 Approach to retain best employees
29 Safeguarding expenses on innovative idea
30 New idea might be proved wrong
31 Example of three famous American companies' innovation
32 Example of one company change its concentration
33 Example of a company resolving financial difficulties itself

Questions 34–37

Do the following statements agree with the information given in Reading Passage 3?
In boxes 34–37 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

34 Umagic is a new representative of innovative small company.
35 Amazon and Wal-Mart exchanged their innovation experience.
36 New idea holder has already been known to take it to small company in the past.
37 IBM failed to understand Umagic's proposal of one new idea.

Questions 38–40

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

38 What is author's opinion on the effect of innovation to companies in paragraph C?
A It only works for big companies.
B Fortune magazine has huge influence globally.
C It is getting more important.
D Effect on American companies is more evident.

39 What is Peter Chernin's point of view on innovation?
A Small company is more innovative than big one.
B Film industry need more innovation than other industries.
C We need to cut the cost when risks occur.
D New ideas are more likely going to big companies.

40 What is author's opinion on innovation at the end of this passage?
A Umagic success lies on the accidental "virtual experts".
B Innovation is easy and straightforward.
C IBM sets a good example on innovation.
D The author's attitude is uncertain on innovation.

READING PASSAGE 15113s3

You should spend about 20 minutes on Question 27–40, which are based on Reading Passage 3 on the following pages.

What Dreams Are Made Of

A Thousands of years ago, dreams were seen as messages from the gods, and in many cultures, they are still considered prophetic. In ancient Greece, sick people slept at the temples of Asclepius, the god of medicine, in order to receive dreams that would heal them. Modern dream science really begins at the end of the 19th century with Sigmund Freud, who theorized that dreams were the expression of unconscious desires often stemming from childhood. He believed that exploring these hidden emotions through analysis could help cure mental illness. The Freudian model of psychoanalysis dominated until the 1970s, when new research into the chemistry of the brain showed that emotional problems could have biological or chemical roots, as well as environmental ones. In other words, we weren't sick just because of something our mothers did (or didn't do), but because of some imbalance that might be cured with medication.

B After Freud, the most important event in dream science was the discovery in the early 1950s of a phase of sleep characterized by intense brain activity and rapid eye movement (REM). People awakened in the midst of REM sleep reported vivid dreams, which led researchers to conclude that most dreaming took place during REM. Using the electroencephalograph (EEG), researchers could see that brain activity during REM resembled that of the waking brain. That told them that a lot more was going on at night than anyone had suspected. But what, exactly?

C Scientists still don't know for sure, although they have lots of theories. On one side are scientists like Harvard's Allan Hobson, who believes that dreams are essentially random. In the 1970s, Hobson and his colleague Robert McCarley proposed what they called the "activation-synthesis hypothesis," which describes how dreams are formed by nerve signals sent out during REM sleep from a small area at the base of the brain called the pons. These signals, the researchers said, activate the images that we call dreams. That put a crimp in dream research; if dreams were meaningless nocturnal firings, what was the point of studying them?

D Adult humans spend about a quarter of their sleep time in REM, much of it dreaming. During that time, the body is essentially paralyzed but the brain is buzzing. Scientists using PET and fMRI technology to watch the dreaming brain have found that one of the most active areas during REM is the limbic system, which controls our emotions. Much less active is the prefrontal cortex, which is associated with logical thinking. That could explain why dreams in REM sleep often lack a coherent story line. (Some researchers have also found that people dream in non-REM sleep as well, although those dreams generally are less vivid.) Another active part of the brain in REM sleep is the anterior cingulate cortex, which detects discrepancies. Eric Nofzinger, director of the Sleep Neuroimaging Program at the University of Pittsburgh Medical Center, thinks that could be why people often figure out thorny problems in their dreams. "It's as if the brain surveys the internal milieu and tries to figure out what it should be doing, and whether our actions conflict with who we are," he says.

E These may seem like vital mental functions, but no one has yet been able to say that REM sleep or dreaming is essential to life or even sanity. MAO inhibitors, an older class of antidepressants, essentially block REM sleep without any detectable effects, although people do get a "REM rebound"--extra REM--if they stop the medication. That's also true of selective serotonin reuptake inhibitors (SSRIs) like Prozac, which reduce dreaming by a third to a half. Even permanently losing the ability to dream doesn't have to be disabling. Israeli researcher Peretz Lavie has been observing a patient named Yuval Chamtzani, who was injured by a fragment of shrapnel that penetrated his brain when he was 19. As a result, he gets no REM sleep and doesn't remember any dreams. But Lavie says that Chamtzani, now 55, "is probably the most normal person I know and one of the most successful ones." He's a lawyer, a painter and the editor of a puzzle column in a popular Israeli newspaper.

F The mystery of REM sleep is that even though it may not be essential, it is ubiquitous--at least in mammals and birds. But that doesn't mean all mammals and birds dream (or if they do, they're certainly not --talking about it). Some researchers think REM may have evolved for physiological reasons. "One thing that's unique about mammals and birds is that they regulate body temperature," says neuroscientist Jerry Siegel, director of UCLA's Center for Sleep Research. "There's no good evidence that any coldblooded animal has REM sleep." REM sleep heats up the brain and non-REM cools it off, Siegel says, and that could mean that the changing sleep cycles allow the brain to repair itself. "It seems likely that REM sleep is filling a basic physiological function and that dreams are a kind of epiphenomenon," Siegel says--an extraneous byproduct, like foam on beer.

G Whatever the function of dreams at night, they clearly can play a role in therapy during the day. The University of Maryland's Clara Hill, who has studied the use of dreams in therapy, says that dreams are a "back door" into a patient's thinking. "Dreams reveal stuff about you that you didn't know was there," she says. The therapists she trains to work with patients' dreams are, in essence, heirs to Freud, using dream imagery to uncover hidden emotions and feelings. Dreams provide clues to the nature of more serious mental illness. Schizophrenics, for example, have poor-quality dreams, usually about objects rather than people. Cartwright has been studying depression in divorced men and women, and she is finding that "good dreamers," people who have vivid dreams with strong story lines, are less likely to remain depressed. She thinks that dreaming helps diffuse strong emotions. "Dreaming is a mental-health activity," she says.

Questions 27–31

Reading passage 3 has seven paragraphs, A–G.
Which paragraph contains the following information?
Write the correct number, A–G, in boxes 1–5 on your answer sheet.

27 Reference of an artist' s dreams.
28 Dream actually happens in animals
29 Dreams are related with benefit and happiness
30 Scientists' advanced technology used in investigation of REM stage..
31 Concern about usefulness of dreams

Questions 32–34

Choose the correct letter, A, B, C or D.
Write the correct letter in boxes 32–34 on your answer sheet.

32 What were dreams regarded as by ancient people?
A superstation and unreliable
B communication with Gods and chance to foresee future
C medical relief for children with illness
D messages to make them feel better when woke up

33 According to Paragraph D , which part of brain controls reasoning?
A anterior cingulate cortex
B internal cortext
C limbic system
D prefrontal cortex

34 What can we conclude when author cited reference on animals.?
A Brain temperature rises when REM pattern happens
B the reason why mammals are intelligent
C dreams are bound to appear with REM
D REM makes people want to drink foam of beer.

Questions 35–40

Look at the following people and the list of statements below..
Match each statement with the correct person,A–G.
Write the correct letter A–G,in boxes 35–40 on your answer sheet.

A Sigmund Freud
B Harvard's Allan Hobson
C Robert McCarley
D Eric Nofzinger
E Peretz Lavie
F Jerry Siegel
G Clara Hill

35 Dream help people tackle problems puzzling them in daytime.
36 He has taken care of a patient who was injured by shrapnel.
37 Dreams sometimes come along with REM as an attachment.
38 People' s dreams provide 'back door' to their state of mind.
39 Decoding dreams would be beneficial for mental disease.
40 Dreams are not worth studying as randomly occur.

READING PASSAGE 1436s2

You should spend about 20 minutes on Question 14–18, which are based on Reading Passage 2 on the following pages.

Antarctica – in from the cold?

A A little over a century ago, men of the ilk of Scott, Shackleton and Mawson battled against Antarctica's blizzards, cold and deprivation. In the name of Empire and in an age of heroic deeds they created an image of Antarctica that was to last well into the 20th century – an image of remoteness, hardship, bleakness and isolation that was the province of only the most courageous of men. The image was one of a place removed from everyday reality, of a place with no apparent value to anyone.

B As we enter the 21st century, our perception of Antarctica has changed. Although physically Antarctica is no closer and probably no warmer, and to spend time there still demands a dedication not seen in ordinary life, the continent and its surrounding ocean are increasingly seen to an integral part of Planet Earth, and a key component in the Earth System. Is this because the world seems a little smaller these days, shrunk by TV and tourism, or is it because Antarctica really does occupy a central spot on Earth's mantle? Scientific research during the past half century has revealed – and continues to reveal – that Antarctica's great mass and low temperature exert a major influence on climate and ocean circulation, factors which influence the lives of millions of people all over the globe.

C Antarctica was not always cold. The slow break-up of the super-continent Gondwana with the northward movements of Africa, South America, India and Australia eventually created enough space around Antarctica for the development of an Antarctic Circumpolar Current (ACC), that flowed from west to east under the influence of the prevailing westerly winds. Antarctica cooled, its vegetation perished, glaciation began and the continent took on its present-day appearance. Today the ice that overlies the bedrock is up to 4km thick, and surface temperatures as low as -89.2deg C have been recorded. The icy blast that howls over the ice cap and out to sea – the so-called katabatic wind – can reach 300 km/hr, creating fearsome wind-chill effects.

D Out of this extreme environment come some powerful forces that reverberate around the world. The Earth' s rotation, coupled to the generation of cells of low pressure off the Antarctic coast, would allow Astronauts a view of Antarctica that is as beautiful as it is awesome. Spinning away to the northeast, the cells grow and deepen, whipping up the Southern Ocean into the mountainous seas so respected by mariners. Recent work is showing that the temperature of the ocean may be a better predictor of rainfall in Australia than is the pressure difference between Darwin and Tahiti – the Southern Oscillation Index. By receiving more accurate predictions, graziers in northern Queensland are able to avoid overstocking in years when rainfall will be poor. Not only does this limit their losses but it prevents serious pasture degradation that may take decades to repair. CSIRO is developing this as a prototype forecasting system, but we can confidently predict that as we know more about the Antarctic and Southern Ocean we will be able to enhance and extend our predictive ability.

E The ocean' s surface temperature results from the interplay between deep-water temperature, air temperature and ice. Each winter between 4 and 19 million square km of sea ice form, locking up huge quantities of heat close to the continent. Only now can we start to unravel the influence of sea ice on the weather that is experienced in southern Australia. But in another way the extent of sea ice extends its influence far beyond Antarctica. Antarctic krill – the small shrimp-like crustaceans that are the staple diet for baleen whales, penguins, some seals, flighted sea birds and many fish – breed well in years when sea ice is extensive, and poorly when it is not. Many species of baleen whales and flighted sea birds migrate between the hemispheres and when the krill are less abundant they do not thrive.

F The circulatory system of the world' s oceans is like a huge conveyor belt, moving water and dissolved minerals and nutrients from one hemisphere to the other, and from the ocean's abyssal depths to the surface. The ACC is the longest current in the world, and has the largest flow. Through it, the deep flows of the Atlantic, Indian and Pacific Oceans are joined to form part of a single global thermohaline circulation. During winter, the howling katabatics sometimes scour the ice off patches of the sea' s surface leaving large ice-locked lagoons, or 'polynyas' . Recent research has shown that as fresh sea ice forms, it is continuously stripped away by the wind and may be blown up to 90km in a single day. Since only fresh water freezes into ice, the water that remains becomes increasingly salty and dense, sinking until it spills over the continental shelf. Cold water carries more oxygen than warm water, so when it rises, well into the northern hemisphere, it reoxygenates and revitalises the ocean. The state of the northern oceans, and their biological productivity, owe much to what happens in the Antarctic.

G Antarctica has, truly, 'come in from the cold' . As we learn more about its effect on climate, ocean circulation and biota we see that it is not a place that is unconnected to the rest of the world; nor is it useless and barren. On the contrary; it is a powerful engine that has impacts on human, animal and plant life across the globe. Australia' s Antarctic scientific research program, undertaken by government and university scientists and facilitated by the Australian Antarctic Division, publishes about 300 research papers and articles annually and is fully engaged in answering fundamental questions about the Continent' s physical and biological attributes, and its role in System Earth. Much of this research was on show at the Australian Academy of Technological Sciences and Engineering' s symposium "Looking South – Managing Technology, Opportunities and the Global Environment" held in Hobart late last year.

Questions 14–18

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

14 The effect of weather prediction on agriculture.
15 Sea ice brings life back to Antarctica.
16 Sea ice formation contributes to northern hemisphere's vitality.
17 The explanation of antarctic climate change.
18 Antarctica was once a forgotten continent.

Questions 19–21

Please match the natural phenomenon with correct related factor
Write the correct letter A–C, in boxes 19–21 on your answer sheet.

A Ice
B Wind
C Air pressure

19 Southern Oscillation Index
20 Fresh water
21 Antarctic Circumpolar Current (ACC)

Questions 22–26

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

Write the correct letter in boxes 22–26 on your answer sheet.

22 Why do Australian farmers value the prediction system?
A Farming method varied according to different climate
B Prevent grassland from degradation
C Prevent animal from dying
D A cell provides fertilizer for the grassland

23 What happens to sea creatures if sea ice decreases?
A Whales are active around sea ice
B Sea birds are affected by high sea level
C Seals number decrease due to failed to breed
D Krills fail to reproduce babies successfully

24 What is the effect of katabatic winds?
A Increase the moving speed of sea ice
B Increase salt level near ocean surface
C Bring fresh ice into southern ocean
D Pile up small hill of ice cap

25 What happens near continent shelf of Antarctica?
A Salt density increase
B Salt density decrease
C Bigger than northern hemisphere's
D Smaller than northern hemisphere's

26 How does Antarctica benefit Northern hemisphere ?
A Antarctica has a comparably larger area
B Salt brings more lives to Northern planet
C Flowed Cold water is rich in oxygen
D Sea creatures favor cold currents

READING PASSAGE 1328s1

You should spend about 20 minutes on Question1–13, which are based on Reading Passage 1 on the following pages.

Classifying societies?

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 southern 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 posed of mobile groups of hunter-gatherers, their sites consist mainly of seasonally occupied camps, and other smaller and more specialized 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-munity societies, with the individual munities integrated into the larger society through kinship ties. Although some tribes have officials and even a "capital" or seat of government, such 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 Catalhöyük in modern Turkey.

Chiefdom

These operate on the principle of ranking—differences in social status between people. Different lineages (a lineage is a group claiming descent from a common ancestor) are graded on a scale of prestige, and the senior lineage, and hence the society as a whole, is governed by a 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 specialization 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 chiefdom generally has a center of power, often with temples, residences of the chief and his retainers, and craft specialists. Chiefdoms vary greatly in size, but the range is generally between about 5000 and 20,000 persons.

Early State

These preserve many of the features of chiefdoms, 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 priests and kinsfolk of the ruler higher still. The functions of the ruler are often separated from those of the priest: palace 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 organize our thoughts.

Questions 1–7

Do the following statements agree with the information given in Reading Passage 1? In boxes 1–7on 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

1.Little economic difference could be found between clan members.
2.There are a wide range of plants that grew by the farmers of a tribe.
3.One settlement is the most important in a tribe
4.How much land a person owns determines his status
5.People craft goods in chiefdoms.
6.The king uses military force to maintain the order of a state.
7.Bureaucratic officers receive higher salaries than other members.

Questions 8–13

Choose No More Than Two Words from the passage for each answer.

Write your answers in boxes 8–13 on your answer sheet.

8 What are carried out at the clan work sites?

9 Besides settle farming, what is the other way of life for tribes?

10 What is the arrangement of Catalhöyük' s housing units?

11 What does a chief reward his subjects apart from giving crafted goods?

12 What is the smallest possible population of a chiefdom?

13 Which group of people is at the bottom of an early state but higher than the farmers?

READING PASSAGE 1417s1

You should spend about 20 minutes on Question 1-14,which are based on Reading Passage 1 on the following pages.

Foot Pedal Irrigation

A Until now, governments and development agencies have tried to tackle the problem through large-scale projects: gigantic dams, sprawling irrigation canals and vast new fields of high-yield crops introduced during the Green Revolution, the famous campaign to increase grain harvests in developing nations. Traditional irrigation, however, has degraded the soil in many areas, and the reservoirs behind dams can quickly fill up with silt, reducing their storage capacity and depriving downstream farmers of fertile sediments. Furthermore, although the Green Revolution has greatly expanded worldwide farm production since 1950, poverty stubbornly persists in Africa, Asia and Latin America. Continued improvements in the productivity of large farms may play the main role in boosting food supply, but local efforts to provide cheap, individual irrigation systems to small farms may offer a better way to lift people out of poverty.

B The Green Revolution was designed to increase the overall food supply, not to raise the incomes of the rural poor, so it should be no surprise that it did not eradicate poverty or hunger. India, for example, has been self-sufficient in food for 15 years, and its granaries are full, but more than 200 million Indians—one fifth of the country's population—are malnourished because they cannot afford the food they need and because the country's safety nets are deficient. In 2000 189 nations committed to the Millennium Development Goals, which called for cutting world poverty in half by 2015. With business as usual, however, we have little hope of achieving most of the Millennium goals, no matter how much money rich countries contribute to poor ones.

C The supply-driven strategies of the Green Revolution, however, may not help subsistence farmers, who must play to their strengths to compete in the global marketplace. The average size of a family farm is less than four acres in India, 1.8 acres in Bangladesh and about half an acre in China. Combines and other modern farming tools are too expensive to be used on such small areas. An Indian farmer selling surplus wheat grown on his one-acre plot could not possibly compete with the highly efficient and subsidized Canadian wheat farms that typically stretch over thousands of acres. Instead subsistence farmers should exploit the fact that their labor costs are the lowest in the world, giving them a

comparative advantage in growing and selling high-value, intensely farmed crops.

D Paul Polak saw firsthand the need for a small-scale strategy in 1981 when he met Abdul Rahman, a farmer in the Noakhali district of Bangladesh. From his three quarter-acre plots of rain-fed rice fields, Abdul could grow only 700 kilograms of rice each year—300 kilograms less than what he needed to feed his family. During the three months before the October rice harvest came in, Abdul and his wife had to watch silently while their three children survived on one meal a day or less. As Polak walked with him through the scattered fields he had inherited from his father, Polak asked what he needed to move out of poverty. "Control of water for my crops," he said, "at a price I can afford."

E Soon Polak learned about a simple device that could help Abdul achieve his goal: the treadle pump. Developed in the late 1970s by Norwegian engineer Gunnar Barnes, the pump is operated by a person walking in place on a pair of treadles and two handle arms made of bamboo. Pr

F operly adjusted and maintained, it can be operated several hours a day without tiring the users. Each treadle pump has two cylinders which are made of engineering plastic. The diameter of a cylinder is 100.5mm and the height is 280mm. The pump is capable of working up to a maximum depth of 7 meters. Operation beyond 7 meters is not recommended to preserve the integrity of the rubber components. The pump mechanism has piston and foot valve assemblies. The treadle action creates alternate strokes in the two pistons that lift the water in pulses.

G The human-powered pump can irrigate half an acre of vegetables and costs only $25 (including the expense of drilling a tube well down to the groundwater). Abdul heard about the treadle pump from a cousin and was one of the first farmers in Bangladesh to buy one. He borrowed the $25 from an uncle and easily repaid the loan four months later. During the five-month dry season, when Bangladeshis typically farm very little, Abdul used the treadle pump to grow a quarter-acre of chili peppers, tomatoes, cabbage and eggplants. He also improved the yield of one of his rice plots by irrigating it. His family ate some of the vegetables and sold the rest at the village market, earning a net profit of $100. With his new income, Abdul was able to buy rice for his family to eat, keep his two sons in school until they were 16 and set aside a little money for his daughter's dowry. When Polak visited him again in 1984, he had doubled the size of his vegetable plot and replaced the thatched roof on his house with corrugated tin. His family was raising a calf and some chickens. He told me that the treadle pump was a gift from God.

H Bangladesh is particularly well suited for the treadle pump because a huge reservoir of groundwater lies just a few meters below the farmers' feet. In the early 1980s IDE initiated a campaign to market the pump, encouraging 75 small private-sector companies to manufacture the devices and several thousand village dealers and tube-well drillers to sell and install them. Over the next 12 years one and a half million farm families purchased treadle pumps, which increased the farmers' net income by a total of $150 million a year. The cost of IDE's market-creation activities was only $12 million, leveraged by the investment of $37.5 million from the farmers themselves. In contrast, the expense of building a conventional dam and canal system to irrigate an equivalent area of farmland would be in the range of $2,000 per acre, or $1.5 billion.

Questions 1–6

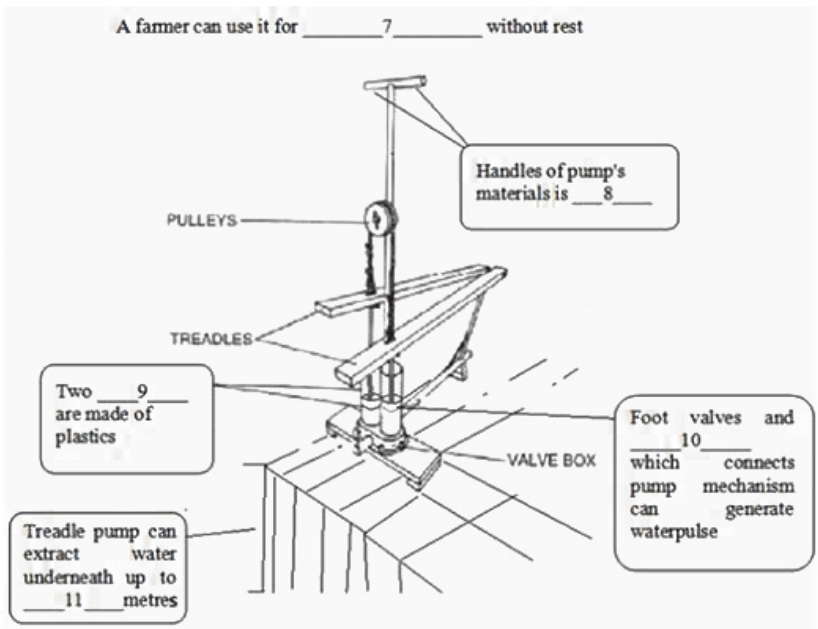
Do the following statements agree with the information given in Reading Passage 1?
In boxes 1–6 on your answer sheet, write

TRUE if the statement is true
FALSE if the statement is false
NOT GIVEN if the information is not given in the passage

1 It is easier to resolve food problem in large scale rather than in small scale.
2 Construction of gigantic dams costs more time in developing countries.
3 Green revolution failed to increase global crop production from the mid of 20th century.
4 Agricultural production in Bangladash declined in last decade.
5 Farmer Abdul Rahman knew how to increase production himself at the beginning.
6 Small pump spread into big project in Bangladesh in the following decade after the campaign.

Questions 7–11

Filling the blanks in diagram of treadle pump's each parts.
Choose NO MORE THAN THREE WORDS AND/OR A NUMBER from the passage for each answer.



Questions 12–14

Answer the questions below.

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

12 How large can a treadle pump irrigate the field according to the passage?
13 What is Abdul's new roof made of?
14 How much did Bangladesh farmers invest under IDE's stimulation?

READING PASSAGE 1424s2

You should spend about 20 minutes on Question 15-27 ,which are based on Reading Passage 2 on the following pages.

Mammoth Kill

A Like their modern relatives, mammoths were quite large. The largest known species reached heights in the region of 4 m at the shoulder and weights up to 8 tonnes , while exceptionally large males may have exceeded 12 tonnes. However, most species of mammoth were only about as large as a modern Asian elephant. Both sexes bore tusks. A first, small set appeared at about the age of six months and these were replaced at about 18 months by the permanent set. Growth of the permanent set was at a rate of about 1 to 6 inches per year.Based on studies of their close relatives, the modern elephants, mammoths probably had a gestation period of 22 months, resulting in a single calf being born. Their social structure was probably the same as that of African and Asian elephants, with females living in herds headed by a matriarch, whilst bulls lived solitary lives or formed loose groups after sexual maturity.

B MEXICO CITY—Although it' s hard to imagine in this age of urban sprawl and automobiles, North America once belonged to mammoths, camels, ground sloths as large as cows, bear-size beavers and other formidable beasts. Some 11,000 years ago, however, these largebodied mammals and others—about 70 species in all—disappeared. Their demise coincided roughly with the arrival of humans in the New World and dramatic climatic change—factors that have inspired several theories about the die-off. Yet despite decades of scientific investigation, the exact cause remains a mystery. Now new findings offer support to one of these controversial hypotheses: that human hunting drove this megafaunal menagerie to extinction. The overkill model emerged in the 1960s, when it was put forth by Paul S. Martin of the University of Arizona. Since then, critics have charged that no evidence exists to support the idea that the first Americans hunted to the extent necessary to cause these extinctions. But at the annual meeting of the Society of Vertebrate Paleontology in Mexico City last October, paleoecologist John Alroy of the University of California at Santa Barbara argued that, in fact, hunting- driven extinction is not only plausible, it was unavoidable. He has determined, using a computer simulation, that even a very modest amount of hunting would have wiped these animals out.

C Assuming an initial human population of 100 people that grew no more than 2 percent annually, Alroy determined that if each band of, say, 50 people killed 15 to 20 large mammals a year, humans could have eliminated the animal populations within 1,000 years. Large mammals in particular would have been vulnerable to the pressure because they have longer gestation periods than smaller mammals and their young require extended care.

D Not everyone agrees with Alroy's assessment. For one, the results depend in part on population-size estimates for the extinct animals—figures that are not necessarily reliable. But a more specific criticism comes from mammalogist Ross D. E. MacPhee of the American Museum of Natural History in New York City, who points out that the relevant archaeological record contains barely a dozen examples of stone points embedded in mammoth bones —hardly what one might expect if hunting drove these animals to extinction. Furthermore, some of these species had huge ranges— the giant Jefferson's ground sloth, for example, lived as far north as the Yukon and as far south as Mexico—which would have made slaughtering them in numbers sufficient to cause their extinction rather implausible, he says.

E MacPhee agrees that humans most likely brought about these extinctions (as well as others around the world that coincided with human arrival), but not directly. Rather he suggests that people may have introduced hyperlethal disease, perhaps through their dogs or hitchhiking vermin, which then spread wildly among the immunologically naive species of the New World. As in the overkill model, populations of large mammals would have a harder time recovering. Repeated outbreaks of a hyperdisease could thus quickly drive them to the point of no return. So far MacPhee does not have empirical evidence for the hyperdisease hypothesis, and it won't be easy to come by: hyperlethal disease would kill far too quickly to leave its signature on the bones themselves. But he hopes that analyses of tissue and DNA from the last mammoths to perish will eventually reveal murderous microbes.

F The third explanation for what brought on this North American extinction does not involve human beings. Instead its proponents blame the loss on the weather. The Pleistocene epoch witnessed considerable climatic instability, explains paleontologist Russell W. Graham of the Denver Museum of Nature and Science. As a result, certain habitats disappeared, and species that had once formed communities split apart. For some animals, this change brought opportunity. For much of the megafauna, however, the increasingly homogeneous environment left them with shrinking geographical ranges— a death sentence for large animals, which need large ranges. Although these creatures managed to maintain viable populations through most of the Pleistocene, the final major fluctuation—the so-called Younger Dryas event— pushed them over the edge, Graham says. For his part, Alroy is convinced that human hunters demolished the titans of the Ice Age. The overkill model explains everything the disease and climate scenarios explain, he asserts, and makes accurate predictions about which species would eventually go extinct. "Personally, I'm a vegetarian," he remarks, "and I find all of this kind of gross—but believable."

Questions 15–21

Summary

Complete the following summary of the paragraphs of Reading Passage, using no more than three words from the Reading Passage for each answer. Write your answers in boxes 15–21 on your answer sheet.

The reason why big size mammals extincted 11,000 years ago is under hot debate. First explanation is that 15.....of human made it happen. This so called 16..... began from 1960s suggested by an expert, which however received criticism of lack of further information. Another assumption is that deadly 17..... from human causes their demises. MacPhee, who supported this idea, suggested that he required 18..... to testify its validity. Graham proposed a third hypothesis that 19.....in Pleistocene epoch drove some species disappear, reduced 20..... posed a dangerous signal to these giants, and 21..... finally wiped them out.

Questions 22–27

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 22–27 on your answer sheet.

NB you may use any letter more than once

AJohn Alroy
BRoss D. E. MacPhee
CRussell W. Graham

22 Human hunting well explained which species would finally disappear.

23 Further grounded proof needed to explain human's indirect impact on mammals.

24 Over hunting situation has caused die-out of large mammals.

25 Illness rather than hunting caused extensive extinction.

26 Doubt raised through the study of several fossil records.

27 Climate shift is the main reason of extinction.

READING PASSAGE 1405s2

You should spend about 20 minutes on Question 14-27,which are based on Reading Passage 2 on the following pages.

Memory and Ag

A. Aging, it is now clear, is part of an ongoing maturation process that all our organs go through. "In a sense, aging is keyed to the level of vigor of the body and the continuous interaction between levels of body activity and levels of mental activity," reports Arnold B. Scheibel, M.D., whose very academic title reflects how once far-flung domains now converge on the mind and the brain. Scheibel is professor of anatomy, cell biology, psychiatry, and behavioral sciences at the University of California at Los Angeles, and director of the university's Brain Research Institute.

B. Equipped with imaging techniques that capture the brain in action, Stanley Rapoport, Ph.D., at the National Institutes of Health, measured the flow of blood in the brains of old and young people as they went through the task of matching photos of faces. Since blood flow reflects neuronal activity, Rapoport could compare which networks of neurons were being used by different subjects. "Even when the reaction times of older and younger subjects were the same, the neural networks they used were significantly different. The older subjects were using different internal strategies to accomplish the same result in the same time," Rapoport says.

C. At the Georgia Institute of Technology, psychologist Timothy Salthouse, Ph.D., compared a group of very fast and accurate typists of college age with another group in their 60s. Since reaction time is faster in younger people and most people's fingers grow less nimble with age, younger typists might be expected to tap right along while the older ones fumble. But both typed 60 words a minute. The older typists, it turned out, achieved their speed with cunning little strategies that made them far more efficient than their younger counterparts: They made fewer finger movements, saving a fraction of a second here and there. They also read ahead in the text. The neural networks involved in typing appear to have been reshaped to compensate for losses in motor skills or other age changes.

D. "When a rat is kept in isolation without playmates or objects to interact with, the animal's brain shrinks, but if we put that rat with 11 other rats in a large cage and give them an assortment of wheels, ladders, and other toys, we can show--after four days--significant differences in its brain," says Diamond, professor of integrative biology. Proliferating dendrites first appear in the visual association areas. After a month in the enriched environment, the whole cerebral cortex has expanded, as has its blood supply. Even in the enriched environment, rats get bored unless the toys are varied. "Animals are just like we are. They need stimulation," says Diamond.

E. One of the most profoundly important mental functions is memory-notorious for its failure with age. So important is memory that the Charles A. Dana Foundation recently spent $8.4 million to set up a consortium of leading medical centers to measure memory loss and aging through brain-imaging technology, neurochemical experiments, and cognitive and psychological tests. One thing, however, is already fairly clear--many aspects of memory are not a function of age at all but of education. Memory exists in more than one form. What we call knowledge--facts--is what psychologists such as Harry P. Bahrick, Ph.D., of Ohio Wesleyan University calls semantic memory. Events, conversations, and occurrences in time and space, on the other hand, make up episodic or event memory, which is triggered by cues from the context. If you were around in 1963 you don't need to be reminded of the circumstances surrounding the moment you heard that JFK had been assassinated. That event is etched into your episodic memory.

F. "Every memory begins as an event," says Bahrick. "Through repetition, certain events leave behind a residue of knowledge, or semantic memory. On a specific day in the past, somebody taught you that two and two are four, but you've been over that information so often you don't remember where you learned it. What started as an episodic memory has become a permanent part of your knowledge base." You remember the content, not the context. Our language knowledge, our knowledge of the world and of people, is largely that permanent or semipermanent residue. Probing the longevity of knowledge, Bahrick tested 1,000 high school graduates to see how well they recalled their algebra. Some had completed the course as recently as a month before, others as long as 50 years earlier. He also determined how long each person had studied algebra, the grade received, and how much the skill was used over the course of adulthood. Surprisingly, a person's grasp of algebra at the time of testing did not depend on how long ago he'd taken the course--the determining factor was the duration of instruction. Those who had spent only a few months learning algebra forgot most of it within two or three years.

G. In another study, Bahrick discovered that people who had taken several courses in Spanish, spread out over a couple of years, could recall, decades later, 60 percent or more of the vocabulary they learned. Those who took just one course retained only a trace after three years. "This long-term residue of knowledge remains stable over the decades, independent of the age of the person and the age of the memory. No serious deficit appears until people get to their 50s and 60s, probably due to the degenerative processes of aging rather than a cognitive loss."

H. group of adult novice chess players were compared with a group of child experts at the game. In tests of their ability to remember a random series of numbers, the adults, as expected, outscored the children. But when asked to remember the patterns of chess pieces arranged on a board, the children won. "Because they'd played a lot of chess, their knowledge of chess was better organized than that of the adults, and their existing knowledge of chess served as a framework for new memory," explains Kail. Specialized knowledge is a mental resource that only improves with time. Crystallized intelligence about one's occupation apparently does not decline at all until at least age 75, and if there is no disease or dementia, may remain even longer. Special knowledge is often organized by a process called "chunking." If procedure A and procedure B are always done together, for example, the mind may merge them into a single command. When you apply yourself to a specific interest--say, cooking--you build increasingly elaborate knowledge structures that let you do more and do it better.

Questions 14–17

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 14–17 on your answer sheet.

AHarry P. Bahrick
BArnold B. Scheibel
CMarion Diamond
DTimothy Salthouse
EStanley Rapport
FRobert Kail

14 Examined both young and old's blood circulation of brain while testing.
15 Aging is a significant link between physical and mental activity.
16 Some semantic memory of a event fade away by repetition.
17 Rat's brain developed when put in a diverse environment.

Questions 18–23

Summary
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 18–23 on your answer sheet.

It's long been known that 18.....declined with age. Charles A. Dana foundation invested millions of dollars to test memory decline. They used advanced technology and ran several cognitive and 19.....experiment. Bahrick called one form "20.....", which describes factual knowledge. Another one is called "21....." contains events in time and space format. He conducted two experiments toward to knowledge memory's longevity, he asked 1000 candidates some knowledge of 22....., and some could even remember it decades ago. Second research of Spanish course found that multiple courses participants could remember more than half of 23.....they learned after decades, whereas single course taker only remembered as short as 3 years.

Questions 24–27

Choose the correct letter, A, B, C or D.
Write your answers in boxes 24–27 on your answer sheet.

24 What does the experiment of typist show in the passage?
A The reading ability of old people is superior.
B Losses of age are irreversible.
C Seasoned tactics made elders more efficient.
D Old people performed poorly in driving test.

25 Which is correct about rat experiment?
A Different toys have different effects for rats.
B Rat's brain weight increased in both cages.
C Isolated rat's brain grows new connections
D Boring and complicated surroundings affect brain development.

26 What can be concluded in chess game of children group?
A They won game with adults.
B Their organization of chess knowledge is better.
C Their image memory is better than adults.
D They used different part of brain when chessing.

27 What is author's purpose of using "vocabulary study" at the end of passage?
A Certain people are sensitive to vocabularies while others aren't.
B Teachers and professionals won by their experience.
C Vocabulary memory as a crystallized intelligence is hard to decline.
D Old people use their special zone of brain when they study.

READING PASSAGE 15283s1

You should spend about 20 minutes on Question 1–13, which are based on Reading Passage 1 on the following pages.

The Diagnose of Bridge

A MOST road and rail bridges are only inspected visually, if at all. Every few months, engineers have to clamber over the structure in an attempt to find problems before the bridge shows obvious signs of damage. Technologies developed at Los Alamos National Laboratory, New Mexico, and Texas A&M University may replace these surveys with microwave sensors that constantly monitor the condition of bridges.

B "The device uses microwaves to measure the distance between the sensor and the bridge, much like radar does," says Albert Migliori, a Los Alamos physicist. "Any load on the bridge – such as traffic – induces displacements, which change that distance as the bridge moves up and down." By monitoring these movements over several minutes, the researchers can find out how the bridge resonates. Changes in its behavior can give an early warning of damage.

C The Interstate 40 bridge over the Rio Grande river in Albuquerque provided the researchers with a rare opportunity to test their ideas. Chuck Farrar, an engineer at Los Alamos, explains: "The New Mexico authorities decided to raze this bridge and replace it. We were able to mount instruments on it, test it under various load conditions and even inflict damage just before it was demolished." In the 1960s and 1970s, 2500 similar bridges were built in the US. They have two steel girders supporting the load in each section. Highway experts know that this design is "fracture critical" because a failure in either girder would cause the bridge to fail.

D After setting up the microwave dish on the ground below the bridge, the Los Alamos team installed conventional accelerometer at several points along the span to measure its motion. They then tested the bridge while traffic roared across it and while subjecting it to pounding from a "shaker", which delivered precise punches to a specific point on the road.

E "We then created damage that we hoped would simulate fatigue cracks that can occur in steel girders," says Farrar. They first cut a slot about 60 centimeters long in the middle of one girder. They then extended the cut until it reached the bottom of the girder and finally they cut across the flange – the bottom of the girder's "I" shape.

F The initial, crude analysis of the bridge's behavior, based on the frequency at which the bridge resonates, did not indicate that anything was wrong until the flange was damaged. But later the data were reanalyzed with algorithms that took into account changes in the mode shapes of the structure – shapes that the structure takes on when excited at a particular frequency. These more sophisticated algorithms, which were developed by Norris Stubbs at Texas A&M University, successfully identified and located the damage caused by the initial cut.

G "When any structure vibrates, the energy is distributed throughout with some points not moving, while others vibrate strongly at various frequencies," says Stubbs. "My algorithms use pattern recognition to detect changes in the distribution of this energy." NASA already uses Stubbs' method to check the behaviour of the body flap that slows space shuttles down after they land.

H A commercial system based on the Los Alamos hardware is now available, complete with the Stubbs algorithms, from the Quatro Corporation in Albuquerque for about $100 000.

I Tim Darling, another Los Alamos physicist working on the microwave interferometer with Migliori, says that as the electronics become cheaper, a microwave inspection system will eventually be applied to most large bridges in the US. "In a decade I would like to see a battery or solar-powered package mounted under each bridge, scanning it every day to detect changes," he says

Questions 1–4

The reading Passage has seven paragraphs A–I.
Which paragraph contains the following information?
Write the correct letter A–I, in boxes 1–5 on your answer sheet.

1 The professional team put pressure to test the motion of the bridge.
2 Engineers apply knife to the bridge to excite cracks.
3 A precious chance of experiment to certificate ideas.
4 The popular application of the microwave inspection system within a decade
5 How the microwave works

Questions 6–9

Choose the correct letter, A, B, C or D.
Write your answers in boxes 6–9 on your answer sheet.

6 What is the responsibility of engineers in order to prevent the damage of the bridge before the invention of the microwave sensors?

AThey have to climb over the bridge.
BThey have to regularly check the bridge
CThey have to inspect the condition of the bridge through monitors.
DThey have to employ others to help them check the bridge.

7 What did the device take advantage of the microwaves to do?

A to calculate the distance
B to induce displacements
C to change the distance
D to give an advanced warning

8 Why did highway experts think the design as "fracture critical" ?
A Engineers failed to take several tests according to different conditions.
B Engineers failed to install conventional accelerometers.
C The supporting part would probably make the bridge fall down.
D No cars drove past the bridge.

9 What was the achievement of Norris Stubbs' s complicated algorithms?
A the identification and location of the damage.
B the movement of some points.
C the renounce of the bridge
D the distribution of the energy

Questions 10–13

Complete the blanks below. Choose No MORE THAN THREE WORDS from the passage for each answer.

10. The weight of the 2500 bridges is sustained by_____ in every sector.
11. ____ were set up by the Los Alamos team in order to test the movement of the bridge.
12. In order to cause break, the Los Alamos team decided to make a ___ at first step.
13. The___ in the bottom of the bridge resembles "I" shape.

READING PASSAGE 1323s2

You should spend about 20 minutes on Question 15–27, which are based on Reading Passage 2 on the following pages.

The British Bittern

A Breeding bitterns became extinct in the UK by 1886 but, following re-colonisation early last century, numbers rose  to a peak of about 70 booming (singing) males in the 1950s, falling to fewer than 20 by the 1990s. In the late 1980s it was clear that the bittern was in trouble, but there was little information on which to base recovery actions.

B Bitterns have cryptic plumage and a shy nature, usually remaining hidden within the cover of reedbed vegetation. Our first challenge was to develop standard methods to monitor their numbers. The boom of the male bittern is its most distinctive feature during the breeding season, and we developed a method to count them using the sound patterns unique to each individual. This not only allows us to be much more certain of the number of booming males in the UK, but also enables us to estimate local survival of males from one year to the next.

C Our first direct understanding of the habitat needs of breeding bitterns came from comparisons of reedbed sites that had lost their booming birds with those that retained them. This research showed that bitterns had been retained in reedbeds where the natural process of succession, or drying out, had been slowed through management. Based on this work, broad recommendations on how to manage and rehabilitate reedbeds for bitterns were made, and funding was provided through the EU LIFE Fund to manage 13 sites within the core breeding range. This project, though led by the RSPB, involved many other organisations.

D To refine these recommendations and provide fine-scale, quantitative habitat prescriptions on the bitterns' preferred feeding habitat, we radio-tracked male bitterns on the RSPB's Minsmere and Leighton Moss reserves. This showed clear preferences for feeding in the wetter reedbed margins, particularly within the reedbed next to larger open pools. The average home range sizes of the male bitterns we followed (about 20 hectares) provided a good indication of the area of reedbed needed when managing or creating habitat for this species. Female bitterns undertake all the incubation and care of the young, so it was important to understand their needs as well. Over the course of our research, we located 87 bittern nests and found that female bitterns preferred to nest in areas of continuous vegetation, well into the reedbed, but where water was still present during the driest part of the breeding season.

E The success of the habitat prescriptions developed from this research has been spectacular. For instance, at Minsmere, booming bittern numbers gradually increased from one to 10 following reedbed lowering, a management technique designed to halt the drying out process. After a low point of 11 booming males in 1997, bittern numbers in Britain responded to all the habitat management work and started to increase for the first time since the 1950s.

F The final phase of research involved understanding the diet, survival and dispersal of bittern chicks. To do this we fitted small radio tags to young bittern chicks in the nest, to determine their fate through to fledging and beyond. Many chicks did not survive to fledging and starvation was found to be the most likely reason for their demise. The fish prey fed to chicks was dominated by those species penetrating into the reed edge. So, an important element of recent studies (including a PhD with the University of Hull) has been the development of recommendations on habitat and water conditions to promote healthy native fish populations.

G Once independent, radio-tagged young bitterns were found to seek out new sites during their first winter; a proportion of these would remain on new sites to breed if the conditions were suitable. A second EU LIFE funded project aims to provide these suitable sites in new areas. A network of 19 sites developed through this partnership project will secure a more sustainable UK bittern population with successful breeding outside of the core area, less vulnerable to chance events and sea level rise.

H By 2004, the number of booming male bitterns in the UK and other countries had increased to 55, with almost all of the increase being on those sites undertaking management based on advice derived from our research. Although science has been at the core of the bittern story, success has only been achieved through the trust, hard work and dedication of all the managers from all over the world, owners and wardens of sites that have implemented, in some cases very drastic, management to secure the future of this wetland species.

I The constructed bunds and five major sluices now control the water level over 82 ha, with a further 50 ha coming under control in the winter of 2005/06. Reed establishment has principally used natural regeneration or planted seedlings to provide small core areas that will in time expand to create a bigger reed area. To date nearly 275,000 seedlings have been planted and reed cover is extensive. Over 3 km of new ditches have been formed, 3.7 km of existing ditch have been re-profiled and 2.2 km of old meander (former estuarine features) have been cleaned out.

J Bitterns now regularly winter on the site with some indication that they are staying longer into the spring. No breeding has yet occurred but a booming male was present in the spring of 2004. A range of wildfowl breed, as well as a good number of reedbed passerines including reed bunting, reed, sedge and grasshopper warblers. Numbers of wintering shoveler have increased so that the site now holds a UK important wintering population. Malltraeth Reserve now forms part of the UK network of key sites for water vole (a UK priority species) and 12 monitoring transects have been established. Otter and brown hare occur on the site as does the rare plant, pillwort.

Questions 15–21

The reading passage has seven paragraphs, A–H

Choose the correct heading for paragraphs A–H from the list below.
Write the correct number, i–viii, in boxes 15–21 on your answer sheet.

List of Headings

iresearch findings and decisions
iifluctuation in bittern number
iiiprotect the young bittern
ivinternational cooperation works
vcalculation of the number
viimportance of food
viiresearch has been successful.
viiiresearch into the reedbed

15 Paragraph A
16 Paragraph B
17 Paragraph C
18 Paragraph D
Paragraph E E.X. vii research has been successful.

19 Paragraph F
20 Paragraph G
21 Paragraph H

Questions 22–26

Answer the questions below.

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

22When this bird reach its peak of number ?
23What does the author describe the bittern's character?
24What is the main cause for the chick bittern's death?
25What is the main food for chick bittern?
26Besides bittern and brown hare, what kind of mammal does protection plan benefit?

Question 27

Choose the correct letter, A, B, C or D.
Write your answers in boxes 27 on your answer sheet.

27What is the main purpose of this passage?

AMain characteristic of a bird called bittern.
BCooperation can protect an endangered species.
CThe difficulty of access information of bittern's habitat and diet.
DTo save wetland and reedbed in UK.

READING PASSAGE 1343s1

You should spend about 20 minutes on Question 1–13, which are based on Reading Passage 1 on the following pages.

Songs of stones

A VICENZA is a pleasant, prosperous city in the Veneto, 60km west of Venice. Its grand families settled and farmed the area from the 16th century. But its principal claim to fame is Andrea Palladio, who is such an influential architect that a neoclassical style is known as Palladian. The city is a permanent exhibition of some of his finest buildings, and as he was born—in Padua, to be precise—500 years ago, the International Centre for the Study of Palladio's Architecture has an excellent excuse for mounting la grande mostra, the big show.

B The exhibition has the special advantage of being held in one of Palladio's buildings, Palazzo Barbaran da Porto. Its bold fa□ade is a mixture of rustication and decoration set between two rows of elegant columns. On the second floor the pediments are alternately curved or pointed, a Palladian trademark. The harmonious proportions of the atrium at the entrance lead through to a dramatic interior of fine fireplaces and painted ceilings. Palladio's design is simple, clear and not over-crowded. The show has been organised on the same principles, according to Howard Burns, the architectural historian who co-curated it.

C Palladio's father was a miller who settled in Vicenza, where the young Andrea was apprenticed to a skilled stonemason. How did a humble miller's son become a world renowned architect? The answer in the exhibition is that, as a young man, Palladio excelled at carving decorative stonework on columns, doorways and fireplaces. He was plainly intelligent, and lucky enough to come across a rich patron, Gian Giorgio Trissino, a landowner and scholar, who organised his education, taking him to Rome in the 1540s, where he studied the masterpieces of classical Roman and Greek architecture and the work of other influential architects of the time, such as Donato Bramante and Raphael.

D Mr Burns argues that social mobility was also important. Entrepreneurs, prosperous from agriculture in the Veneto, commissioned the promising local architect to design their country villas and their urban mansions. In Venice the aristocracy were anxious to co-opt talented artists, and Palladio was given the chance to design the buildings that have made him famous—the churches of San Giorgio Maggiore and the Redentore, both easy to admire because they can be seen from the city's historical centre across a stretch of water.

E He tried his hand at bridges—his unbuilt version of the Rialto Bridge was decorated with the large pediment and columns of a temple—and, after a fire at the Ducal Palace, he offered an alternative design which bears an uncanny resemblance to the Banqueting House in Whitehall in London. Since it was designed by Inigo Jones, Palladio's first foreign disciple, this is not as surprising as it sounds.

F Jones, who visited Italy in 1614, bought a trunk full of the master's architectural drawings; they passed through the hands of the Dukes of Burlington and Devonshire before settling at the Royal Institute of British Architects in 1894. Many are now on display at Palazzo Barbaran. What they show is how Palladio drew on the buildings of ancient Rome as models. The major theme of both his rural and urban building was temple architecture, with a strong pointed pediment supported by columns and approached by wide steps.

G Palladio's work for rich landowners alienates unreconstructed critics on the Italian left, but among the papers in the show are designs for cheap housing in Venice. In the wider world, Palladio's reputation has been nurtured by a text he wrote and illustrated, "Quattro Libri dell'Architettura" . His influence spread to St Petersburg and to Charlottesville in Virginia, where Thomas Jefferson commissioned a Palladian villa he called Monticello.

H Vicenza's show contains detailed models of the major buildings and is leavened by portraits of Palladio's teachers and clients by Titian, Veronese and Tintoretto; the paintings of his Venetian buildings are all by Canaletto, no less. This is an uncompromising exhibition; many of the drawings are small and faint, and there are no sideshows for children, but the impact of harmonious lines and satisfying proportions is to impart in a viewer a feeling of benevolent calm. Palladio is history's most therapeutic architect.

I "Palladio, 500 Anni: La Grande Mostra" is at Palazzo Barbaran da Porto, Vicenza, until January 6th 2009. The exhibition continues at the Royal Academy of Arts, London, from January 31st to April 13th, and travels afterwards to Barcelona and Madrid.

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

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

1 The exhibition held in a building which has been redecorated lately.

2 Palazzo Barbaran da Porto reflects Palladio' s design

3 Palladio' s father was an architect worker.

4 Palladio' s family refused to pay his fee of studying architecture.

5 Palladio' s alternative design for the Ducal Palace is similar to the Banqueting House

6 Palladio' s design is not only for rich people, but also the poor.

7 The show includes paintings done by famous artists

Questions 8–13

Answer the questions below.
Choose NO MORE THAN THREE WORDS from the passage for each answer.
Write your answers in boxes 8––13 on your answer sheet.

8 What did Palladio do in Vicenza before he became an architect?

9 Who covered the fee of Palladio' s architectural studies?

10 Who was the first non-domestic student influenced by Palladio?

11 What kind of ancient Roman buildings affected Palladio' s work deeply?

12 What text strengthened Palladio' s reputation?

13 According to the writer' s opinion, what will visitors feel about the exhibition?

READING PASSAGE 15240s1

You should spend about 20 minutes on Question 1-13,which are based on Reading Passage 1 on the following pages.

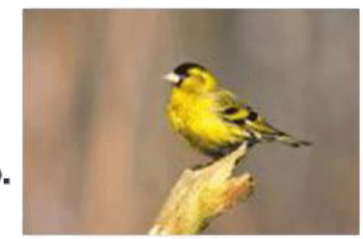
Charles Darwin's theory and Finches

A Today, the quest continues. On Daphne Major- one of the most desolate of the Galápagos Islands, an uninhabited volcanic cone where cacti and shrubs seldom grow higher than a researcher's knee-- Peter and Rosemary Grant have spent more than three decades watching Darwin's finches respond to the challenges of storms, drought and competition for good . Biologist at Princeton University, the Grants know and recognize many of the individual birds on the island and can trace the birds' lineages back through time.They have witnessed Darwin's principle in action again and again, over many generations of finches.

B The Grants' most dramatic insights have come from watching the evolving bill of the medium ground finch. The plumage of this sparrow-sized bird ranges from dull brown to jet black. At first glance, it may not seem particularly striking, but among scientists who study evolutionary biology, the medium ground finch is a superstar. Its bill is a middling example in the array of shapes and sizes found among Galápagos finches: heftier than that of the small ground finch, which specializes in eating small, soft seeds , but petite compared to that of the large ground finch, an expert at cracking and devouring big, hard seeds.

C When the Grants began their study in 1970s, only two species of finch lived on Daphne Major, the medium ground finch and the cactus finch. The island is so small that the researchers were able to count and catalogue every bird. When a severe drought hit in 1977, the birds soon devoured(v.偷吃，毁灭)the last of the small, easily eaten seeds. Smaller members of the medium ground finch population, lack the bill strength to crack large seeds, died out.

D Bill and body size are inherited traits, and the next generation had a high proportion of big-billed individuals. The Grants had documented natural selection at work-- the same process that, over many millennia, directed the evolution of the Galápagos' 14 unique finch species, all descended from a common ancestor that reached the islands a few million years ago.



E Eight years later(1985), heavy rains brought by an El Nino transformed the normally meager vegetation on Daphne Major. Vines and other plants that in most years struggle for survival suddenly flourished, choking out the plants that provide large seeds to the finches. Small seeds came to dominate the food supply, and big birds with big bills died out at a higher rate than smaller ones, 'Natural selection is observable,' Rosemary Grant says. 'It happens when the environment changes. When local conditions reverse themselves, so does the direction of adaptation.'

F Recently, the Grants witnessed another form of natural selection acting on the medium ground finch: competition from bigger, stronger cousins. In 1982 ,a third finch, the large ground finch, came to live on Daphne Major. The stout bills of these birds resemble the business end of a crescent wrench. Their arrival was the first such colonization recorded on the Galápagos in nearly a century of scientific observation. 'We realized,' Peter Grant says, 'we had a very unusual and potentially important event to follow.' For 20 years, the large ground finch coexisted with the medium ground finch, which shared the supply of large seeds with its bigger-billed relative. Then, in 2002 and 2003, another drought struck. None of the birds nested that year, and many died out. Medium ground finches with large bills, crowded out of feeding areas by the more powerful large ground finches, were hit particularly hard.

G When wetter weather returned in 2004, and the finches nested again, the new generation of the medium ground finch was dominated by smaller birds with smaller bills, able to survive on smaller seeds. This situation, says Peter Grant, marked the first time that biologists have been able to follow the complete process of an evolutionary change due to competition between species and the strongest response to natural selection that he had seen in 33 years of tracking Galápagos finches.

H On the inhabited island of Santa Cruz, just south of Paphne Major, Andrew Hendry of McGill University and Jeffrey Podos of the University of Massachusetts at Amherst have discovered a new, man-made twist in finch evolution. Their study focused on birds living near the Academy Bay research station, on the fringe of the town of Puerto Ayora. The human population of the area has been growing fast – from 900 people in 1974 to 9,582 in 2001. 'Today Puerto Ayora is full of hotels and mai tai bars,' Hendry says. 'People have taken this extremely arid place and tried to turn it into a Caribbean resort

I Academy Bay records dating back to the early 1960s show that medium ground finches captured there had either small or large bills. Very few of the birds had mid-size bills. The finches appeared to be in the early stages of a new adaptive radiation: If the trend continued, the medium ground finch on Santa Cruz could split into two distinct subspecies, specializing in different types of seeds. But in the late 1960s and early 70s, medium ground finches with medium-sized bills began to thrive at Academy Bay. The booming human population had introduced new food sources, including exotic plants and bird feeding stations stocked with rice. Billseze, once critical to the finches' survival, no longer made any difference. 'Now an intermediate bill can do fine,' Hendry says.

J At a control site distant from Puerto Ayore, and relatively untouched by humans, the medium ground finch population remains split between large-and small-billed birds, On undisturbed parts of Sanda Cruz, there is continue to diversify. In town, thought these are still many finches, once-distinct population are merging.

K The finches of Santa Cruz demonstrate a subtle process in which human meddling can stop evolution in its tracks, ending the formation of new species. In a time when global biodiversity continues its downhill slide, Darwin' s finches have yet another unexpected lesson to teach. 'If we hope to regain some of the diversity that' s already been lost,' Hendry says, 'we need to protect not just existing creatures, but also the processes that drive the origin of new species.'

Question 1–8

Complete the table below.
Choose NO MORE THAN TWO WORDS from Reading Passage 1 for each answer.
Write your answers in boxes 1–8 on your answer sheet.

Year	Climate or other reasons	Finch' s condition
1977	Serious 1 _____	Small-beak birds had no power to open 2_____ which led their extinction.
1985	3_____ by caused by El nino	Big-beak birds dying out, with 4_____as the main food source.
2004	5 _____came back.	Birds with 6_____ were majority in medium sized flinch, they have superiority on small seeds.
late 1960s	Rise of human population	Number of 7_____ birds grow prosperously, as feeding plants provided by human full of 8_____.

Question 9–1

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

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

9Grants' discovery questioned Darwin' s theory.
10The medium ground finch are less affected by the food than the cactus finches.
11All birds were affected by the drought in 2002 and 2003.
12The discovery of Andrew Hendry and Jeffrey Podos parallels that of the previous studies.
13Human intervention affected flinch' s revolution on Santa Cruz.

READING PASSAGE 15299s1

You should spend about 20 minutes on Question 1-13,which are based on Reading Passage 1 on the following pages.

Choices and Happiness

A Americans today choose among more options in more parts of life than has ever been possible before. To an extent, the opportunity to choose enhances our lives. It is only logical to think that if some choice is good, more is better; people who care about having infinite options will benefit from them, and those who do not can always just ignore the 273 versions of cereal they have never tried. Yet recent research strongly suggests that, psychologically, this assumption is wrong. Although some choice is undoubtedly better than none, more is not always better than less.

B Recent research offers insight into why many people end up unhappy rather than pleased when their options expand. We began by making a distinction between "maximizers" and "satisficers" .

C In particular, we composed a set of statements—the Maximization Scale—to diagnose people' s propensity to maximize. Then we had several thousand people rate themselves from 1 to 7 on such statements as "I never settle for second best." We also evaluated their sense of satisfaction with their decisions.We did not define a sharp cutoff to separate maximizers from satisficers, but in general, we think of individuals whose average scores are higher than 4 as maximizers and those whose scores are lower than the midpoint as satisficers. People who score highest on the test—the greatest maximizers—engage in more product comparisons than the lowest scorers, both before and after they make purchasing decisions, and they take longer to decide what to buy. When satisficers find an item that meets their standards, they stop looking. But maximizers exert enormous effort reading labels, checking out consumer magazines and trying new products. They also spend more time comparing their purchasing decisions with those of others.

D We found that the greatest maximizers are the least happy with the fruits of their efforts. When they compare themselves with others, they get little pleasure from finding out that they did better and substantial dissatisfaction from finding out that they did worse. They are more prone to experiencing regret after a purchase, and if their acquisition disappoints them, their sense of well-being takes longer to recover. They also tend to brood or ruminate more than satisficers do.

E Does it follow that maximizers are less happy in general than satisficers? We tested this by having people fill out a variety of questionnaires known to be reliable indicators of well-being. As might be expected, individuals with high maximization scores experienced less satisfaction with life and were less happy, less optimistic and more depressed than people with low maximization scores. Indeed, those with extreme maximization ratings had depression scores that placed them in the borderline clinical range.

F Several factors explain why more choice is not always better than less, especially for maximizers. High among these are "opportunity costs." The quality of any given option cannot be assessed in isolation from its alternatives. One of the "costs" of making a selection is losing the opportunities that a different option would have afforded. Thus, an opportunity cost of vacationing on the beach in Cape Cod might be missing the fabulous restaurants in the Napa Valley. EARLY DECISION-MAKING RESEARCH by Daniel Kahneman and Amos Tversky showed that people respond much more strongly to losses than gains. If we assume that oppoyunity costs reduce the overall desirability of the most preferred choice, then the more alternatives there are, the deeper our sense of loss will be and the less satisfaction we will derive from our ultimate decision.

G The problem of opportunity costs will be worse for a maximizer than for a satisficer. The latter' s "good enough" philosophy can survive thoughts about opportunity costs. In addition, the "good enough" standard leads to much less searching and inspection of alternatives than the maximizer' s "best" standard. With fewer choices under consideration, a person will have fewer opportunity costs to subtract.

H Just as people feel sorrow about the opportunities they have forgone, they may also suffer regret about the option they settle on. My colleagues and I devised a scale to measure proneness to feeling regret, and we found that people with high sensitivity to regret are less happy, less satisfied with life, less optimistic and more depressed than those with low sensitivity. Not surprisingly, we also found that people with high regret sensitivity tend to be maximizers. Indeed, we think that worry over future regret is a major reason that individuals become maximizers. The only way to be sure you will not regret a decision is by making the best possible one. Unfortunately, the more options you have and the more opportunity costs you incur, the more likely you are to experience regret.Regret.

I In a classic demonstration of the power of sunk costs, people were offered season subscriptions to a local theater company. Some were offered the tickets at full price and others at a discount. Then the researchers simply kept track of how often the ticket purchasers actually attended the plays over the course of the season. Full-price payers were more likely to show up at performances than discount payers. The reason for this, the investigators argued, was that the full-price payers would experience more regret if they did not use the tickets because not using the more costly tickets would constitute a bigger loss. To increase sense of happiness, we can decide to restrict our options when the decision is not crucial. For example, make a rule to visit no more than two stores when shopping for clothing.

Question 1-4

Look at the following statements(Question 1-4)and the list of people below.Match each statement with the correct person,A-D.Write the correct letter,A-D,in boxes 1-4 on your answer sheet.

NB You may use any letter more than once.

A Maximizers
B Satisficers
C Both
D Neither of them

1 finish transaction when the items match their expectation
2 buy the most expensive things when shopping
3 consider repeatedly until they make final decision
4 particular in the questionnaire of the author

Questions 5-9

Do the following statements agree with the information given in Reading Passage 1? In boxes 5-9 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

5 With the society' s advancement, more chances make our lives better and happier.
6 There is difference of finding by different gender classification.
7 The feeling of loss is greater than that of acquisition.
8 "good enough " standard brings about more effort on searching than "best" standard.
9 There are certain correlations between the 'regret' people and the maximizers.

Questions 10-13

Choose the correct letter, A, B, C or D. Write the correct letter in boxes 10-13 on your answer sheet.

10 What is the subject of this passage?
A regret makes people less happy
B choices and well-being
C an interesting phenomenon
D advices on shopping

11 According to conclusion of questionnaires, which of the following statement is correct?
A maximizers are less happy
B state of being optimistic is important
C uncertain results are found
D maximizers tend to cross bottom line

12 The experimental on theater tickets suggested:
A sales are different according to each season
B people like to spend on the most expensive items
C people feel depressed if they spend their vouchers
D people would regret if they failed to attend the plays.

13 What is author' s suggestion on how to increase happiness:
A focus the final decision
B be sensitive and smart
C reduce the choice or option
D read label carefully

READING PASSAGE 31336s3

You should spend about 20 minutes on Question 27–40, which are based on Reading Passage 3 on the following pages.

Talc Powder

A Peter Brigg discovers how talc from Luzenac' s Trimouns in France find its way into food and agricultural products – from chewing gum to olive oil. High in the French Pyrenees, some 1,700m above see 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 talc' 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.

B 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 tones 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' s Specialties business unit in 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 suppler 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."

C 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,

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.

D 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 solid 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 content is often either too high or too low. These olives are easy to recognize because they produce a lot of extra foam during the stirring process, a consequence of an excess of a fine solid 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.

E "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."

F 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.

G 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."

H 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 27–32

Use the information in the passage to match each use of talc power with correct application from A, B or C. Write the appropriate letters A–C in boxes 27–32 on your answer sheet.
NB you may use any letter more than once

AFruit protection
BChewing gum business
COlive oil extraction

27 Talc is used to increase the size of drops.

28 Talc is applied to reduce foaming.

29 Talc is employed as a filler of base.

30 Talc is modified and prevented sunburn.

31 Talc is added to stop stickiness.

32 Talc is used to increase production.

Questions 33–38

Summary
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 33–38 on your answer sheet.

Spanish olive oil industry has been using talc in oil extraction process for about _____33_____years. Difficult olives are easy to be spot because they generate lots of ____34_____. _____35_____generated in smaller factories contains emulsified oil, which is hard to _____36_____ . Consequently, once it is released outside, it could be _____37_____ to the environment. However, talc power added in the process is enable to absorb the emulsifier oil. It improves the oil extraction production, with aid of talc powder, size of oil _____38_____ increased.

Questions 39–40

Answer the questions below using NO MORE THAN THREE WORDS from the passage for each answer.
Write your answers in boxes 39–40 on your answer sheet.

39 In which process is talc used to clear the stickness of chewing gum?

40 Which group of farmers does Invelop intend to target in a long view?

READING PASSAGE 15144s2

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

The History of "Farmer"


Robert Laidlaw

A. History of Farmer trading company: In 1909 Robert Laidlaw establishes mail-order company Laidlaw Leeds in Fort Street, Auckland. Then, Branch expansion: purchase of Green and Colebrook chain store; further provincial stores in Auckland and Waikato to follow. Opening of first furniture and boot factory. In 1920, Company now has 29 branches; Whangarei store purchased. Doors open at Hobson Street for direct selling to public. Firm establishes London and New York buying offices. With permission from the Harbour Board, the large FARMERS electric sign on the Wyndham Street frontage is erected.

B. IN 1935, if the merchandise has changed, the language of the catalogues hasn't. Robert Laidlaw, the Scottish immigrant who established the century-old business, might have been scripting a modern-day television commercial when he told his earliest customers: Satisfaction, or your money back. "It was the first money back guarantee ever offered in New Zealand by any firm," says Ian Hunter, business historian. "And his mission statement was, potentially, only the second one ever found in the world." Laidlaw's stated aims were simple to build the greatest business in New Zealand, to simplify every transaction, to eliminate all delays, to only sell goods it would pay the customer to buy.

C. This year, the company that began as a mail-order business and now employs 3500 staff across 58 stores turns 100. Its centenary will be celebrated with the release of a book and major community fundraising projects, to be announced next week. Hunter, who is writing the centenary history, says "coming to a Farmers store once a week was a part of the New Zealand way of life". By 1960, one in every 10 people had an account with the company. It was the place where teenage girls shopped for their first bra, where newlyweds purchased their first dinner sets, where first pay cheques were used to pay off hire purchase furniture, where Santa paraded every Christmas.

D. Gary Blumenthal's mother shopped there, and so does he. The fondest memory for the Rotorua resident? "We were on holiday in Auckland ... I decided that up on the lookout tower on top of the Farmers building would be a unique place to fit the ring on my new fiancée's finger." The lovebirds, who had to wait for "an annoying youth" to leave the tower before they could enjoy their engagement kiss, celebrate their 50th wedding anniversary in June.

E. Farmers, says Hunter, has always had a heart. This, from a 1993 North & South interview with a former board chairman, Rawdon Busfield: "One day I was in the Hobson Street shop and I saw a woman with two small children. They were clean and tidily dressed, but poor, you could tell. That week we had a special on a big bar of chocolate for one shilling. I heard the woman say to her boy, `no, your penny won't buy that'. He wasn't wearing shoes. So I went up to the boy and said, `Son, have you got your penny?' He handed it to me. It was hot he'd had it in his hand for hours. I took the penny and gave him the chocolate."

F. Farmers was once the home of genteel tearooms, children's playgrounds and an annual sale of celebration for birthday of Hector the Parrot (the store mascot died, aged 131, in the 1970s his stuffed remains still occupy pride of place at the company's head office). You could buy houses from Farmers. Its saddle factory supplied the armed forces, and its upright grand overstrung pianos offered "the acme of value" according to those early catalogues hand-drawn by Robert Laidlaw himself. Walk through a Farmers store today and get hit by bright lights and big brands. Its Albany branch houses 16 international cosmetics companies. It buys from approximately 500 suppliers, and about 30% of those are locally owned.

G. "Eight, 10 years ago," says current chief executive Rod McDermott, "lots of brands wouldn't partner with us. The stores were quite distressed. We were first price point focused, we weren't fashion focused. "Remove the rose-tinted nostalgia, and Farmers is, quite simply, a business, doing business in hard times. Dancing with the Stars presenter Candy Lane launches a clothing line? "We put a trial on, and we thought it was really lovely, but the uptake wasn't what we thought it would be. It's got to be what the customer wants," says McDermott.

H. Lincoln Laidlaw, now aged 88, and the son of the company's founder, remembers the dark days following the stockmarket crash and the collapse of Chase. "I think, once, Farmers was like a big family and all of the people who worked for it felt they were building something which would ultimately be to their benefit and to the benefit of New Zealand... then the business was being divided up and so that kind of family situation was dispelled and it hasn't been recovered." For a turbulent few years, the stores were controlled, first by a consortium of Australian banks and later Deka, the Maori Development Corporation and Foodland Associated Ltd. In 2003, it went back to "family" ownership, with the purchase by the James Pascoe Group, owned by David and Anne Norman the latter being the great-granddaughter of James Pascoe, whose first business interest was jewellery.

Questions 14–18

The reading Passage has seven paragraphs A–J.
Which paragraph contains the following information?
Write the correct letter A–J, in boxes 14–18 on your answer sheet.

14Generosity offered in an occasion.
15Innovation of offer made by the head of company.
16Fashion was not its strong point.
17A romantic event on the roof of farmer' s. building.
18Farmer was sold to a private owned company.

Questions 19–23

Complete the sentence below.
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 19–24 on your answer sheet.

19 Farmer was first founded as a _____in Auckland by Mr. Laidlaw.

20 Farmer developed fast and bought one _____ afterward.

21 During oversea expansion, Farmer set up _____in London and New York.

22 Farmer had been holding a _____once a year for the well-known parrot.

23 In the opinion of Lincoln Laidlaw, Farmers was like a _____ for employees before depression of the company .

Questions 24–26

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 24–26 on your answer sheet.
NB you may use any letter more than once

ALincoln Laidlaw
BRod McDermott
Clan Hunter

24 Product got worse as wrong direction focused.

25 An unprecedented statement made by Farmer in New Zealand.

26 Character of the company was changed.

READING PASSAGE 13241s2

You should spend about 20 minutes on Question14-27,which are based on Reading Passage 2 on the following pages.

Theory of Mind in Children

A A considerable amount of research since the mid 1980s has been concerned with what has been termed children's theory of mind. This involves children's ability to understand that people can have different beliefs and representations of the world-- a capacity that is shown by four years of age. Furthermore, this ability appears to be absent in children with autism. The ability to work out that another person is thinking is clearly an important aspect of both cognitive and social development. Furthermore, one important explanation for autism is that children suffering from this condition do not have a theory of mind(TOM). Consequently, the development of children's TOM has attracted considerable attention.

B Wimmer and Perner devised a 'false belief task' to address this question. They used some toys to act out the following story. Maxi left some chocolate in a blue cupboard before he went out. When he was away his mother moved the chocolate to a green cupboard. Children were asked to predict where Maxi will look for his chocolate when he returns. Most children under four years gave the incorrect answer, that Maxi will look in the green cupboard. Those over four years tended to give the correct answer, that Maxi will look in the blue cupboard. The incorrect answers indicated that the younger children did not understand that Maxi's beliefs and representations no longer matched the actual state of the world, and they failed to appreciate that Maxi will act on the basis of his beliefs rather than the way that the world is actually organised.

C A simpler version of the Maxi task was devised by Baron-Cohen to take account of criticisms that younger children may have been affected by the complexity and too much information of the story in the task described above. For example, the child is shown two dolls, Sally and Anne, who have a basket and a box, respectively. Sally also has a marble, which she places in her basket, and then leaves to take a walk. While she is out of the room, Anne takes the marble from the basket, eventually putting it in the box. Sally returns, and child is then asked where Sally will look for the marble. The child passes the task if she answers that Sally will look in the basket, where she put the marble; the child fails the task if she answers that Sally will look in the box, where the child knows the marble is hidden, even though Sally cannot know, since she did not see it hidden there. In order to pass the task, the child must be able to understand that another's mental representation of the situation is different from their own, and the child must be able to predict behavior based on that understanding. The results of research using false-belief tasks have been fairly consistent: most normally-developing children are unable to pass the tasks until around age four.

D Leslie argues that, before 18 months, children treat the world in a literal way and rarely demonstrate pretence. He also argues that it is necessary for the cognitive system to distinguish between what is pretend and what is real. If children were not able to do this, they would not be able to distinguish between imagination and reality. Leslie suggested that this pretend play becomes possible because of the presence of a de-coupler that copies primary representations to secondary representations. For example, children, when pretending a banana is a telephone, would make a secondary representation of a banana. They would manipulate this representation and they would use their stored knowledge of 'telephone' to build on this pretence.

E There is also evidence that social processes play a part in the development of TOM. Meins and her colleagues have found that what they term mindmindedness in maternal speech to six-month old infants is related to both security of attachment and to TOM abilities. Mindmindedness involves speech that discusses infants' feelings and explains their behaviour in terms of mental stages(e.g. 'you' re feeling hungry')

F Lewis investigated older children living in extended families in Crete and Cyprus. They found that children who socially interact with more adults, who have more friends. And who have more older siblings tend to pass TOM tasks at a slightly earlier age than other children. Furthermore, because young children are more likely to talk about their thoughts and feelings with peers than with their mothers, peer interaction may provide a special impetus to the development of a TOM. A similar point has been made by Dunn, who argues that peer interaction is more likely to contain pretend play and that it is likely to be more challenging because other children, unlike adults, do not make large adaptations to the communicative needs of other children.

G In addition, there has been concern that some aspects of the TOM approach underestimate children's understanding of other people. After all, infants will point to objects apparently in an effort to change a person's direction of gaze and interest; they can interact quite effectively with other people; they will express their ideas in opposition to the wishes of others; and they will show empathy for the feeling of others. Schatz studied the spontaneous speech of three-year-olds and found that these children used mental terms, and used them in circumstances where there was a contrast between, for example, not being sure where an object was located and finding it, or between pretending and reality. Thus the social abilities of children indicate that they are aware of the difference between mental states and external reality at ages younger than four.

H A different explanation has been put forward by Harris. He proposed that children use 'simulation'. This involves putting yourself in the other person's position, and then trying to predict what the other person would do. Thus success on false belief tasks can be explained by children trying to imagine what they would do if they were a character in the stories, rather than children being able to appreciate the beliefs of other people. Such thinking about situations that do not exist involves what is termed counterfactual reasoning.

Questions 14-20

Use the information in the passage to match the people(listed A-H) with opinions or deeds below. Write the appropriate letters A-H in boxes 1-6 on your answer sheet.

NB You may use any letter more than once.

A Baron-Cohen
B Meins
C Wimmer and Perner
D Lewis
E Dunn
F Schatz
G Harris
H Leslie

14 found that children under 4 can tell difference between reality and mentality
15 conducted famous experiment and drew a conclusion that children under 4 were unable to comprehend the real state of the world.
16 found that children who get along with sisters and brothers often passed test more easily
17 revised an easier experiment rule out the possibility that children might be influenced by sophisticated reasoning.
18 a terminology related social factor such as emotion.
19 peer play is more important than parent' s interaction in young children.
20 Children may be more willing to act as a role in stories rather than understand other's belief.

Questions 21-27

Summary

Complete the following summary of the paragraphs of Reading Passage, using no more than three words from the Reading Passage for each answer. Write your answers in boxes 21-27 on your answer sheet.

In 1980s theory called 21_____was designed to research if children have the ability to represent the reality. First experiment carried out on the subject of a boy. And questions had been made on where the boy can find the location of 22_____But it was accused that this experiment had excessive 23_____. So another modified experiment was conducted involving two dolls, and most children passed the test at the age of 24_____.Then Lewis and Dunn researched 25_____children in a certain place, and found children who play with 26_____ have more mates and companions. Besides,peer interaction is 27_____because of consisting pretending elements.

READING PASSAGE 10131s3

You should spend about 20 minutes on Question 27–40 which are based on Reading Passage 3 on the following pages

Paper or Computer?

A Computer technology was supposed to replace paper. But that hasn't happened every country in the western world uses more paper today, on a per-capita basis, than it did ten years ago. The consumption of uncoated free-sheet paper, for instance--the most common kind of office paper--rose almost fifteen per cent in the United States between 1995 and 2000. This is generally taken as evidence of how hard it is to eradicate old, wasteful habits and of how stubbornly resistant we are to efficiencies offered by computerization. .

B Economists at the I.M.F spend most of their time writing reports on complicated economic questions, work that would seem to be perfectly suited to sitting in front of a computer. Nonetheless, the I.M.F is awash in paper, and Sellen and Harper wanted to find out way. Their answer is that the business of writing reports --at least at the I.M.F--is an intensely collaborative process, involving the professional judgments and contributions of many people. The economists bring drafts of reports to conference rooms, spread out the relevant pages, and negotiate changes with one other. They go back to their offices and jot down comments in the margin, taking advantage of freedom offered by the informality of the handwritten note. Then they deliver the annotated draft to the author in person, taking him, page by page, through the suggested changes. At the end of the process, the author spreads out all the pages with comments on his desk and starts to enter them on the computer--moving the pages around as he works, organizing and reorganizing, Saving and discarding.

C Without paper, this kind of collaborative, iterative work process would be much more difficult. According to Sellen and Harper, paper has a unique set of "affordances"--that is, qualities that permit specific kind of uses. Paper is tangible: we can pick up a document, flip through it, read little bits here and there, and quickly get a sense of it. Paper is spatially flexible, meaning that we can spread it out and arrange it in the way that suits us best. And it's tailorable: we can easily annotate it, and scribble on it as we read, without altering the original text. Digital documents, of course, have their own affordances. They can be easily searched, shared, stored, accessed remotely, and linked to other relevant material. But they lack the affordances that really matter to a group working together on a report.

D Paper enables a certain kind of thinking, for instance, the top of your desk. Chances are that you have a keyboard and a computer screen off to one side, and a clear space roughly eighteen inches square in front of your chair. What covers the rest of the desktop in probably piles--piles of papers journals, magazines, binders, postcards, videotapes, and all the other artifacts of the knowledge economy. The piles look like a mess, but they aren't. When a group at Apple Computer studied piling behavior several years ago, they found that even the most disorderly piles usually make perfect sense to the piler, and office workers could hold forth in great detail about the precise history and meaning of their piles. The pile closest to the cleared, eighteen-inch-square working area, for example, generally represents the most urgent business, and within that pile the most important document of all is likely to be at the top. Piles are living, breathing archives. Over time, they get broken down and resorted, sometimes chronologically and sometimes thematically and sometimes chronologically and thematically; clues about certain documents may be physically embedded in the file by, say, stacking a certain piece of paper at an angle or inserting dividers into the stack.

E But why do we pile documents instead of filing them? Because piles represent the process of active, ongoing thinking. The psychologist Alison Kidd, whose research Sellen and Harper refer to extensively, argues that "knowledge workers" use the physical space of the desktop to hold" ideas which they cannot yet categorize of even decide how they might use." The messy desk is not necessarily a sign of disorganization. It may be a sign of complexity: those who deal with many unresolved ideas simultaneously cannot sort and file the papers on their desks, because they haven't yet sorted and filed the ideas in their head.

F Sellen and Harper arrived at similar findings when they did some consulting work with a chocolate manufacturer. The people in the firm they were most interested in were the buyers-- the staff who handled the company's relationships with its venders, from cocoa and sugar manufacturers to advertisers. The buyers kept folders(containing contracts, correspondence, meeting notes, and so forth) on every supplier they had dealings with. The company wanted to move the information in those documents online, to save space and money , and make it easier for everyone in the firm to have access to it. That sounds like an eminently rational thing to do. But when Sellen and Harper looked at the folders they discovered that they contained all kinds of idiosyncratic material--advertising paraphernalia, printouts of e-mails, presentation notes, and letters-- much of which had been annotated in the margins with thoughts and amendments and, they write, " perhaps most important, comments about problems and issues with a supplier's performance not intended for the supplier's eyes." The information in each folder was organized--if it was organized at all-- according to the whims of the particular buyer. Whenever other people wanted to look at a document, they generally had to be walked through it by the buyer who" owned" it, because it simple wouldn't make sense otherwise. The much advertised advantage of digitizing documents--that they could be made available to anyone, at any time--was illusory: documents cannot speak for themselves. "

G This idea that paper facilitates a highly specialized cognitive and social process is a far cry from the way we have historically thought about the stuff. Paper first began to proliferate in the workplace in the late nineteenth century as part of the move toward" systematic management." To cope with the complexity of the industrial economy, managers were instituting company-wide policies and demanding monthly, weekly, or even daily updates from their subordinates. Thus was born the monthly sales report, and the office manual and the internal company newsletter. The typewriter took off in the eighteen-eighties, making it possible to create documents in a fraction of the time it had previously taken, and that was followed closely by the advent of carbon paper, which meant that a typist could create ten copies of that document simultaneously.Then the secretary would make ten carbon copies of that schedule and send them out to the stations along your railway line. Paper was important not to facilitate creative collaboration and thought but as an instrument of control.

Questions 27–33

Reading passage 3 has seven paragraphs, A–G.
Choose the correct heading for paragraphs A–G from the list of headings below.
Write the correct number, i–x, in boxes 27–33 on your answer sheet.

List of headings
I paper continued as a sharing or managing must
II Inspiring piles can be long habituated
iii process that economists used paper
iv overview of an unexpected situation: paper survived
v comparison between paper and computer
vi IMF' paperless office seemed to be a waste of papers
vii example of failure for avoidance of paper record
viii advantages of using a paper in offices
ix piles reflect certain characteristics in people' thought
x joy of having the paper square in front of computer

27 paragraph A
28 paragraph B
29 paragraph C
30 paragraph D
31 paragraph E
32 paragraph F
33 paragraph G

Questions 34–36

Complete the notes below.
Choose NO MORE THAN TWO WORDS from the Passage for each answer.
Write your answers in boxes 34–36on your answer sheet.

Compared with digital documents, paper has several advantages. First it allows clerks to work in a ___34___ way among colleagues. Next, paper is not like virtual digital versions, it's__35___ Finally, because it is __36__, note or comments can be effortlessly added as related information.

Questions 37–40

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

37 What do the economists from IMF say that their way of documents?
A they note their comments for pleasure
B they finish individually
C they share authorship
D they use electronic version fully

38 What is the implication of the "Piles" mentioned in the passage?
A they have underlying orders
B they are necessarily a mess
C they are in time sequence order
D they are in alphabetic order

39 What does the manager believe in sophisticated economy?
A recorded paper as management tool
B strict supervision in compulsory
C Teamwork is the most important
D monthly report is the best way

40 According to the end of this passage, what is the reason why paper is not replaced by electronic vision?
A paper is inexpensive to buy
B it contributed to management theories in western countries
C people need time for changing their old habit
D Paper is a significant medium for supervision

READING PASSAGE 12113s1

You should spend about 20 minutes on Question 1-13,which are based on Passage 1 on the following pages.

Extinction Mysterious of The Dinosaurs

A. EVERYBODY knows that the dinosaurs were killed by an asteroid. Something big hit the earth 65m 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.

B. 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 202m years ago, that they overran the planet and turned into the monsters depicted in the book and movie "Jurassic Park" . 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.

C. 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.

D. 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.

E. 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.

F. 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".

G. 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.

H. 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. Eubrontes giganteus, for example, is there a mere 10,000 years after the iridium anomaly . The Eubrontes prints were made by theropods—the dinosaur group that went on to produce such nightmares as Allosaurus and Tyrannosaurus—and Eubrontes is already 20% bigger than any theropod track recorded from the Triassic.

I. 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 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.

J. 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 left that is more than 200m years old, so a crater that formed in the ocean would have been swallowed up by now.

K. 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 perceptible effect on the world, but the rocks from 214m years ago do not record one. It is possible, therefore, that Manicouagan has been misdated. That will be the next thing to check.

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

YES if the statement agrees with the information
NO if the statement contradicts the information
NOT GIVEN if there is no information on this

1.There is still doubt about the theory that the dinosaurs disappeared due to asteroid strike.

2.Dr Paul Olsen and his colleagues believed that asteroid knock also lead to dinosaurs boom and continued to work in this field.

3.Books and magazines exaggerated the size of the dinosaurs in Cretaceous period.

4.Dinosaur footprints are more adequate than dinosaur skeletons.

5.Ichnotaxa showed that footprints of dinosaurs offer exact information of the trace left by animals.

6.Dinosaurs did live both in the Triassic and Jurassic, in terms of evidence of ichnotaxa .

Questions 7-13

Summary
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 7-13 on your answer sheet.

Dr Olsen and his colleagues explained that there was a fast transformation of dinosaurs' body because of a term named 7_____. For example, animals in some place have no 8_____. An good example is a lizard called Komodo in Indonesia, it is an indigenous huge lizard which people named it as 9_____.

The issue float to the surface: Where did it happen? The answer may be that we have 10_____ useful clues. Firstly, Old craters are difficult to be spot or they probably 11_____. Or the deep seabed is 12_____under the impact of crust movement. Another hypothesis is that the available knowledge about crater record is 13_____.

READING PASSAGE 12312s1

You should spend about 20 minutes on Question 1–13, which are based on Reading Passage 1 on the following pages.

Education Philosophy of Children

A In 1660s, while there are few accurate statistics for child mortality in the preindustrial world, there is evidence that as many as 30 percent of all children died before they were 14 days old. Few families survived intact. All parents expected to bury some of their children and they found it difficult to invest emotionally in such a tenuous existence as a newborn child. When the loss of a child was commonplace, parents protected themselves from the emotional consequences of the death by refusing to make an emotional commitment to the infant. How else can we explain mothers who call the infant "it," or leave dying babies in gutters, or mention the death of a child in the same paragraph with a reference to pickles?

B One of the most important social changes to take place in the Western world in 18th century was the result of the movement from an agrarian economy to an industrial one. Increasingly, families left the farms and their small-town life and moved to cities where life was very different for them. Social supports that had previously existed in the smaller community disappeared, and problems of poverty, crime, sub-standard housing and disease increased. For the poorest children, childhood could be painfully short, as additional income was needed to help support the family and young children were forced into early employment. Children as young as 7 might be required to work full-time jobs, often under unpleasant and unhealthy circumstances, from factories to prostitution.

C Over the course of the 1800s, establishing a background the technological advance of the mid-1880s, coupled with the creation of a middle class and the redefinition of roles of family members, meant that work and home became less synonymous over the course of time. People began to buy their children toys and books to read. As the country slowly became more dependent upon machines for work, both in rural and in urban areas, it became less necessary for children to work inside the home. With the beginning of the Industrial Revolution, John Locke was one of the most influential writers of his period. His writings on the role of government are seen as foundational to many political movements and activities, including the American Revolution and the drafting of the Declaration of Independence. His ideas are equally foundational to several areas of psychology. As the father of "British empiricism." Locke made the first clear and comprehensive statement of the "environmental position" and, by so doing, became the father of modern learning theory. His teachings about child care were highly regarded during the colonial period in America.

D Jean Jacquesd Rousseau lived during an era of the American and French Revolution. His works condemn distinctions of wealth, property, and prestige. In the original state of nature, according to Rousseau, people were "noble savages" , innocent, free and uncorrupted. Rousseau conveyed his educational philosophy through his famous novel Emile, in 1762, which tell the story of a boy' s education from infancy to adulthood. Rousseau observed children and adolescents extensively and spoke of children' s individuality, but he based much of his developmental theory on observation in writing the book, and on the memories of his own childhood. Rousseau contrasts children to Developmental Psychology in Historical Perspective adults and describes age-specific characteristics. Johan Heinrich Pestalozzi lived during the early stages of industrial revolution, he sought to develop schools would nurture children' s development. He agreed with Rousseau that humans are naturally good but were spoiled by a corrupt society. Pestalozzi' s approach to teaching can be divided into the general and special methods.The theory was designed to create a emotionally healthy homelike learning environment that had to be in place before more specific instruction occurred.

E One of the best documented cases of all the so-called feral children concerned a young man who was captured in a small town in the south of France in 1800, and who was later named Victor. The young man had been seen in the area for months before his final capture — pre-pubescent, mute, and naked, perhaps 11or 12 years old, foraging for food in the gardens of the locals and sometimes accepting their direct offers of food. Eventually he was brought to Paris, where it was hoped that he would be able to answer some of the profound questions about the nature of man,but that goal was quashed very early. Jean-Marc-Gaspard Itard, a young physician who had become interested in working with the deaf, was more optimistic about a future for Victor and embarked on a five-year plan of education to civilize him and teach him to speak. With a subsidy from the government, Itard spent an enormous amount of time and effort working with Victor. He was able to enlist the help of a local woman, Madame Gu erin, to assist in his efforts and provide a semblance of a home for Victor. But, after five years and despite all of his efforts, Itard considered the experiment to be a failure. Victor' s lessons were discontinued, although he continued to live with Madame Gu erin until his death, approximately at the age of 40.

F Other educators were beginning to respond to the simple truth that was embedded in the philosophy of Rousseau. One of the early examples of this approach was the invention of the kindergarten – a word and a movement created by Friedrich Froebel in 1840, a German-born educator. Froebel placed particular emphasis on the importance of play in a child' s learning. His invention, in different forms, would eventually find its way around the world. His ideas about education were initially developed through his association with Johann Heinrich Pestalozzi. Froebel spent five years teaching at one of Pestalozzi' s model schools in Frankfurt, and later he studied with Pestalozzi himself. Eventually he was able to open his own schools to test his educational theories. One of his innovative ideas was his belief that women could serve as appropriate educators of young children — an unpopular view at the time. At the age of 58, after almost four decades as a teacher, Froebel introduced the notion of the kindergarten. By the time of Froebel' s death in 1852, dozens of kindergartens had been created in Germany. Their use increased in Europe and the movement eventually reached and flourised in the United Stated in 20th century.

Questions 1-4

The reading passage has six paragraphs, A-F
Choose the correct heading for paragraphs A-F from the list below.
Write the correct number, i-vii, in boxes 1-4 on your answer sheet.

List of Headings

iApproaches made by two famous educator.
iiChildren hand to work to alleviate burden on family
iiiWhy children are not highly valued
ivChildren died in hospital at their early age
vPolitics related philosophy appeared
viCreative learning method was applied on certain wild kid
viiEmerge and spread of called kindergarten

1 Paragraph A
Example: Paragraph B ii
2Paragraph C
3Paragraph D
4Paragraph E

Questions 5-8

Use the information in the passage to match the time (listed A-C) with correct event below. Write the appropriate letters A-C in boxes 5-8 on your answer sheet.

A18th century
B19th century
C20th century

5need for children to work
6rise of middle class
7emergence of a kindergarten
8the kindergarten in the spread around US

Question 9-13

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

AJean Jacquesd Rousseau
BJean-Marc-Gaspard Itard
CJohan Heinrich Pestalozzi
DFriedrich Froebel

9was not successful to prove the theory
10combined development of both other children and himself.
11promoted some emotional activities between school and family
12corruption is not a characteristic in people' s nature
13responsible for the increased number of a type of school in Germany.

READING PASSAGE 1446s2

You should spend about 20 minutes on Question 14–26, which are based on Reading Passage 2 on the following pages

Western Immigration of Canada

A By the mid-1870s Canada wanted an immigrant population of agricultural settlers established in the West. No urban centres existed on the prairies in the 1870s, and rural settlement was the focus of the federal government's attention. Western rural settlement was desired, as it would provide homesteads for the sons and daughters of eastern farmers, as eastern agricultural land filled to capacity. As well, eastern farmers and politicians viewed western Canada, with its broad expanses of unpopulated land, as a prime location for expanding Canada's agricultural output, especially in terms of wheat production to serve the markets of eastern Canada.

B To bolster Canada's population and agricultural output, the federal government took steps to secure western land. The Dominion of Canada purchased Rupert's Land from the Hudson's Bay Company in 1870. In 1872, the federal government enacted the Dominion Lands Act. This act enabled settlers to acquire 160 acres of free land, as long as settlers remained on their land for a period of three years, made certain minor improvements to the land, and paid a $10.00 registration fee. The Canadian government also created a Mounted Police Force in 1873. The Mounties journeyed West to secure the area for future settlers. By 1876 the NWMP had established themselves in the West. The major posts included Swan River, Fort Saskatchewan, Fort Calgary, Fort Walsh and Fort Macleod. All of these initiatives attracted a number of eastern-Canadian settlers, as well as European and American immigrants, to Canada's West, and particularly to the area of Manitoba.

C The surest way to protect Canadian territory, and to achieve the secondary goal of joining British Columbia to the rest of the country, was to import large numbers of Eastern Canadian and British settlers. Settling the West also made imperative the building of a transcontinental railway. The railway would work to create an east-west economy, in which western Canada would feed the growing urban industrial population of the east, and in return become a market for eastern Canadian manufactured goods.

D Winnipeg became the metropolis of the West during this period. Winnipeg's growth before 1900 was the result of a combination of land speculation, growth of housing starts, and the federal government's solution in 1881 of Winnipeg as a major stop along the CPR. This decision culminated in a land boom between 1881 and 1883 which resulted in the transformation of hamlets like Portage la Prairie and Brandon into towns, and a large increase in Manitoba's population. Soon, Winnipeg stood at the junction of three transcontinental railway lines which employed thousands in rail yards. Winnipeg also became the major processor of agricultural products for the surrounding hinterland.

E The majority of settlers to Winnipeg, and the surrounding countryside, during this early period were primarily Protestant English-speaking settlers from Ontario and the British Isles. These settlers established Winnipeg upon a British-Ontarian ethos which came to dominate the society's social, political, and economic spirit. This British-Ontarian ethnic homogeneity, however, did not last very long. Increasing numbers of foreign immigrants, especially from Austria-Hungary and the Ukraine soon added a new ethnic element to the recent British, the older First Nation Métis, and Selkirk's settler population base. Settling the West with (in particular) Eastern Canadians and British immigrant offered the advantage of safeguarding the 49th parallel from the threat of American take-over, had not the Minnesota legislature passed a resolution which provided for the annexation of the Red River district. The Red River in 1870 was the most important settlement on the Candian prairies. It contained 11,963 inhabitants of whom 9,700 were Métis and 575 First Nations. But neighbouring Minnesota already had a population of over 100,000.

F Not all of the settlers who came to western Canada in the 1880s, however desired to remain there. In the 1870s and 1880s, economic depression kept the value of Canada's staple exports low, which discouraged many from permanent settlement in the West. Countries including Brazil, Argentina, Australia, New Zealand and the United States competed with Canada for immigrants. Many immigrants, and thousands of Canadians, chose to settle in the accessible and attractive American frontier. Canada before 1891 has been called "a huge demographic railway station" where thousands of men, women, and children were constantly going and coming, and where the number of departures invariably exceeded that of arrivals."

G By 1891 Eastern Canada had its share of both large urban centres and problems associated with city life. While the booming economic centres of Toronto and Montreal were complete with electricity and telephones in the cities' wealthiest areas by the turn of the century, slum conditions characterised the poorest areas like the district known as 'the Ward' in Toronto. Chickens and pigs ran through the streets; privy buckets spilled onto backyards and lanes creating cesspools in urban slums. These same social reformers believed that rural living, in stark contrast to urban, would lead to a healthy, moral, and charitable way of life. Social reformers praised the ability of fresh air, hard work, and open spaces for 'Canadianizing' immigrants. Agricultural pursuits were seen as especially fitting for attaining this 'moral' and family-oriented way of life, in opposition to the single male-dominated atmosphere of the cities. Certainly, agriculture played an important part of the Canadian economy in 1891. One third of the workforce worked on farms.

H The Canadian government presented Canada's attractions to potential overseas migrants in several ways. The government offered free or cheap land to potential agriculturists. As well, the government established agents and/or agencies for the purpose of attracting emigrants overseas. Assisted passage schemes, bonuses and commissions to agents and settlers and pamphlets also attracted some immigrants to Canada. The most influential form of attracting others to Canada, however remained the letters home written by emigrants already in Canada. Letters from trusted friends and family members. Letters home often contained exaggerations of the 'wonder of the new world.' Migrant workers and settlers already in Canada did not want to disappoint, or worry, their family and friends at home. Embellished tales of good fortune and happiness often succeeded in encouraging others to come.

Questions 15–21

The reading passage has seven paragraphs, A–H
Choose the correct heading for paragraphs A–H from the list below.
Write the correct number, i–xi, in boxes 15–21 on your answer sheet.

List of Headings
i Not all would stay in Canada forever
ii Government's safeguard in the West
iii Eastern Canada is full
iv Built-up of the new infrastructure
v British domination in community
vi Ethnics and language make-up
vii Pursing a pure life
viii Police recruited from mid class families
ix Demand of western immigration
x First major urban development of the West
xi Attracting urban environment
xii Advertising of Western Canada

Example: Paragraph A ix

15 Paragraph B
16 Paragraph C
17 Paragraph D
18 Paragraph E
19 Paragraph F
20 Paragraph G
21 Paragraph H

Questions 22–27

Summary
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 22–27 on your answer sheet.

With the saturation of Eastern Canada, Western rural area would supply _____22_____for the descendants of easterners. Politicians also declared that Western area got potential to increase _____23_____ of Canada, in terms of _____24_____ crop that consumed in the East. Federal government started to prepare and made it happen.

First, government bought a land from a private _____25_____, and legally offered certain area to people who stayed for a qualified period of time. Then a mounted _____26_____ was found to secure the land. However, the best way to protect citizens was to build a_____27_____ to transport the migrants and goods between the West and the East.

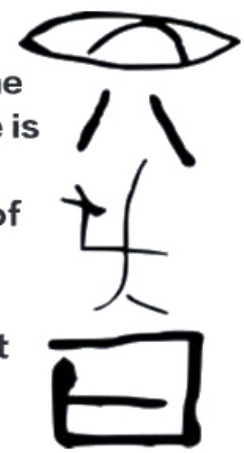
READING PASSAGE 1413s1

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

Proto-Writing

A Ice Age Symbol: The stencilled hand and red dots on a boulder shown opposite are probably 20,000 years old. They were made in a cave at Pech Merle, in Lot, in southern France. Numerous examples of Ice Age painting and drawing - on cave walls and on objects- have turned up in southern France over the last century or so, some of which carry unexplained signs. Is all this writing? If we mean-is it part of a "system of graphic symbol that can be used to convey any and all thought-then the answer is no. Let us call the Ice Age signs and other forms of partial writing "proto-writing". Endless varieties of "proto-writing" exist, coming from all periods, including our own age.

B Tallies: Tallies are among the oldest types of proto-writing. Ice age bones have been discovered bearing series of neat notches. Microscopic examination suggests that the notches were made with various tools over a period of time. A plausible explanation is that the bones are lunar notations: by keeping track of the phase of the moon, Ice Age humans created useful calendars.



C Inca Quipus The Inca civilization is a celebrated exception to the general picture which emerges, of empires requiring writing. There is no script of the Incas, unlike the Aztecs and the Maya. Instead, a knotted arrangement of rope and cords called a 'quipu' kept track of the movement of goods in the Inca empire, Quipus were the sole bureaucratic recording device of the Incas; it was the job of the 'quipucamayocs', or knot keepers, in each town, to tie and interpret the knot records. The system worked well, and was retained for some time after the arrival of the Spanish 'conquistadores' in the 16th century. 'Guaman Poma de Ayala' is a Inca imperial clerk with a quipu, and quipu from Peru. There were many types of knot in a quipu, each type representing a value in a decimal system.

D Amerindian Pictograms: The above pictograms were 'written' in 1883 by the chief of the Oglala Sioux, at the behest of the US Indian agent in Dakota Territory. They list warriors. Their names are given by the signs above their heads, for instance, the Bear-Spares-Him, Iron-Hawk, Red-Horn-Bull, Charging-Hawk, Wears-the-feature and Red-Crow. There are also a very few example of pictographic 'letters' sent by American Indian. Quote marks around the word letter are necessary, because the 'letters' are not true letters: they are more like secret code letters that can be understand only by those 'in the know'

E This letter was the work of a Cheyenne man called Turtle-Following-His-Wife and was addressed to his son Little-Man. It said that he was sending his son $53 represented by 53 little circles and asking him to return home. The letter was mailed by Turtle-Following-His-Wife, but the money was given to Agent Dyer with an explanation of the letter's meaning. Dyer sent the money and a covering explanation to Agent McGillycuddy, so that the agent was able to hand over the money to Little-man on presentation of his father's letter. Presumably father and son had agreed on a letter in a similar style before the son had gone away from his father.

F Other Pictographs: Siberian Love Letter: A glance tells us that we cannot make much sense of this document, simply by studying its constituent shapes and interrelationships, The explanation is as follows. The conifer-shaped objects represent people. Conifer c is the writer(female), conifer b the addressee(male), who was formerly the writer's lover but is now living with conifer a, a Russian woman, away from the Yukaghir village. This has naturally disrupted the relationship between the writer and the addressee, hence the line x from the head of the Russian woman which cuts through the line joining b and c. But the a-b menage is a stormy one, and the writer is unhappy alone in here house; she is still thinking of the addressee.

G It is a charming design, once explained, which was, not surprisingly, seduced many willing scholars into thinking it a true letter, an example of lanuage-free pictographic communication. But this is fallacy. Recent careful investigation of original Russian sources has revealed that the 'letter' was really a sort of Yukaghir party game with songs, cut into birchbark by a love-lorn girl. As she carved, other young Yukaghir would gather round, banter with her, and try to guess the meaning. This was made much easier by the fact that everyone knew each other. The 'letter' was never designed to be sent; its contents were conveyed orally to the addressee, either by the girl herself or by someone else.

H Clay Tokens: Excavation in the middle east have yield, besides clay tablets, large numbers of small, nondescript clay objects. According to the stratigraphy of the excavations, the objects date from 8000 BC to as late as 1500 BC, though the number of finds dated after 3000BC tails off. No one knows their purpose for sure. The most probable explanation is that they were counting units in accountancy. Different shapes could have been used for different entities, such as a sheep from a flock, or a specified measure of a certain product, such as a bushel of grain. The number and variety of shapes could have been extended so that no one object of a particular shape could stand for, ten sheep or a hundred sheep, or black sheep as opposed to white ones.

I Clay Envelopes: The most interesting finds of clay tokens are those in which the tokens have been enclosed in a clay envelope, generally shaped as a ball and known as a 'bulla', the outer surface has been sealed, and impressions have been made in its surface, which sometimes correspond to the contents. There are some 80 bullae known to exist with tokens intact: picked up and shaken, they rattle; X-rayed, they reveal the outlines of tokens within. A few bullae have been opened, while others have been found broken during excavation and the contents dispersed without proper records. But despite the limited evidence, certain conclusions can be drawn.

Questions 1-7

Use the information in the passage to match the type of proto-writing with correct information each contains below. Write the appropriate letters A-D in boxes 1-7 on your answer sheet.
NB you may use any letter more than once

ATallies
BInca Quipus
CAmerindian Pictograms
DOther Pictographs

1 Operation of trained worker.

2 Music and songs.

3 Knowledge of nature.

4 The writing of correspondence.

5 Record of numbers.

6 Family relationship.

7 Courtship and romantic story.

Questions 8-13

Do the following statements agree with the information given in Reading Passage 1?
In boxes 8-13 on your answer sheet, write

TRUE if the statement is true
FALSE if the statement is false
NOT GIVEN if the information is not given in the passage

8 There is still no satisfying answer about when and where human's writing started.

9 Inca Quipus were recorded in the field of buying and selling.

10 Inca Empire has more advanced writing system than Aztecs and Maya.

11 Inca Quipus were handled by a group of special workers to record.

12 Not only pictogram expert investigated pictograms but people from other field participated Amerindian pictograms research.

During excavation, researchers found that most clay envelopes were preserved well.

READING PASSAGE 13166s2

You should spend about 20 minutes on Question14–26, which are based on Reading Passage 2 on the following pages.

Making Copies

A Copying is the engine of civilization: culture is behavior duplicated. The oldest copier invented by people is language, by which an idea of yours becomes an idea of mine. The second great copying machine was writing. When the Sumerians firstly transposed spoken words into stylus marks on clay tablets more than 5,000 years ago, they hugely extended the human network that language had created. Writing freed copying from the chain of living contact. It made ideas permanent, portable and endlessly reproducible.

B Until Johann Gutenberg invented the printing press in the mid-1400s, producing a book in an edition of more than one generally meant writing it out again. Printing with moveable type was not copying, however. Gutenberg couldn't take a document that already existed, feed it into his printing press and run off facsimiles. The first true mechanical copier was manufactured in 1780, when James Watt, who is better known as the inventor of the modern steam engine, created the copying press. Few people today know what a copying press was, but you may have seen one in an antiques store, where it was perhaps called a book press. A user took a document freshly written in special ink, placed a moistened sheet of translucent paper against the inked surface and squeezed the two sheets together in the press, causing some of the ink from the original to penetrate the second sheet, which could then be read by turning it over and looking through its back.

C Copying presses were standard equipment in offices for nearly a century and a half. (Thomas Jefferson used one, and the last president whose official correspondence was copied on one was Calvin Coolidge.) The machines were displaced, beginning in the late 1800s, by a combination of two 19th century inventions: the typewriter and carbon paper.

D Among the first modern copying machines, introduced in 1950 by 3M, was the Thermo-Fax, and it made a copy by shining infrared light through an original document and a sheet of paper that had been coated with heat-sensitive chemicals. Competing manufacturers soon introduced other copying technologies and marketed machines called Dupliton, Dial- A-Matic Autostat, Verifax, Copease and Copymation. These machines and their successors were welcomed by secretaries, who had no other means of reproducing documents in hand, but each had serious drawbacks. All required expensive chemically treated papers. And all made copies that smelled bad, were hard to read, didn' t last long and tended to curl up into tubes.

E Success was not immediate. Haloid, with considerable help from Battelle, introduced its first xerographic copier, which it called the Model A, in 1949, but the machine was almost comically difficult to operate, and all the early testers returned it. In 1959, it introduced an office copier called the Haloid Xerox 914, a machine that, unlike its numerous competitors, made sharp, permanent copies on ordinary paper—a huge breakthrough. The process, which Haloid called xerography , was so unusual and nonintuitive that physicists who visited the drafty warehouses where the first machines were built sometimes expressed doubt that it was even theoretically feasible.

F Remarkably, xerography was conceived by one person— Chester Carlson, a shy, soft-spoken patent attorney, who grew up in almost unspeakable poverty and worked his way through junior college and the California Institute of Technology. He made his discovery in solitude in 1937 and offered it to more than 20 major corporations, among them IBM, General Electric, Eastman Kodak and RCA. All of them turned him down, expressing what he later called "an enthusiastic lack of interest" and thereby passing up the opportunity to manufacture what Fortune magazine would describe as "the most successful product ever marketed in America." Carlson' s invention was indeed a commercial triumph. Essentially overnight, people began making copies at a rate that was orders of magnitude higher than anyone had believed possible. This year, the world will produce more than three trillion xerographic copies and laser-printed pages—about 500 for every human on earth.

G At 15, Chester began jotting down ideas for inventions and making other notes in a pocket diary, a practice he maintained for the rest of his life. He sketched concepts for a rotating billboard, a machine for cleaning shoes and a trick safety pin (which could be made to look as though it had pierced a finger). He was fascinated by printing and the graphic arts. When he was 10, his favorite possession was a toy typewriter. Later, he worked in a print shop and published a magazine, the Amateur Chemists' Press, for scienceminded classmates. He graduated in 1930 and was hired by Bell Labs, in New York City, as a research engineer. After a year, he transferred to the company' s patent department, believing the skills he would learn there might be useful to him when he became an inventor. Carlson came to terms with his wealth by divesting himself of most of it. His charities business during the final decade of his life was prodigious. It was also entirely anonymous. When he gave the money to build a building, he did not permit his name to be revealed publicly, never mind be engraved in stone above the door.

Questions 14–19

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

In boxes 14–19on 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

14 Human' s first written words were noted on papyrus by Sumerians.
15 Much training work was needed after Johann Gutenberg' s invention of moveable type.
16 Coping press was invented in late 18th century after the appearance of steam engine.
17 Copying presses was sold poorly after its invention from end of 18th century.
18 Several invention of modern copying machines from 1950 needed costly paper.
19 Unlike earlier coping inventions, Haloid Xerox 914 allowed works printed on the plain papers well and lasting.

Questions 20–26

Complete the summary below.
Choose NO MORE THAN TWO WORDS from the passage for each answer
Write your answers in boxes 20–26 on your answer sheet.

Haloid Company, also called Xerox Corporation, is better known for its photographic technology. Its first copier was called 20_____ which was a product with many drawbacks. After that, in 1959 another innovative machine made itself a successful copier. The idea was proposed by Chester Carlson, a/an 21_____, who lobbied 20 big 22_____ in 1937. However, all of them showed little interest. Finally Carlson' s new product was demonstrated as a 23_____. His copy machine was used at an unexpected rate. At the age of 10, a miniature typewriter was his fancy 24_____, Later on he finished his college and worked as an engineer in Bell Labs of New York, where he determined to be an 25_____ in terms of experience he learned. With large accumulated wealth, he nevertheless devoted enormous fortune to 26_____in a modest way in the rest of his life.

READING PASSAGE 15123s2

You should spend about 20 minutes on Question 14–27, which are based on Reading Passage 2 on the following pages

Human Navigation–Finding Our Way

A. The human positioning system is flexible and capable of learning. Anyone who knows the way from point A to point B--and from A to C--can probably figure out how to get from B to C, too. But how does this complex cognitive system really work? Researchers are looking at several strategies people use to orient themselves in space: guidance, path integration and route following. We may use all three or combinations thereof. As experts learn more about these navigational skills, they are making the case that our abilities may underlie our powers of memory and logical thinking.

B. If you ask passersby for help, most likely you will receive information in many different forms. A person who orients herself by a prominent landmark would gesture southward: "Look down there. See the tall, broad MetLife Building? Head for that--the station is right below it." Neurologists call this navigational approach "guidance", meaning that a landmark visible from a distance serves as the marker for one's destination.

C. Another city dweller might say: "What places do you remember passing? ... Okay. Go toward the end of Central Park, then walk down to St. Patrick's Cathedral. A few more blocks, and Grand Central will be off to your left." In this case, you are pointed toward the most recent place you recall, and you aim for it. Once there you head for the next notable place and so on, retracing your path. Your brain is adding together the individual legs of your trek into a cumulative progress report. Researchers call this strategy "path integration." Many animals rely primarily on path integration to get around, including insects, spiders, crabs and rodents. The desert ants of the genus Cataglyphis employ this method to return from foraging as far as 100 yards away. They note the general direction they came from and retrace their steps, using the polarization of sunlight to orient themselves even under overcast skies. On their way back they are faithful to this inner homing vector. Even when a scientist picks up an ant and puts it in a totally different spot, the insect stubbornly proceeds in the originally determined direction until it has gone "back" all of the distance it wandered from its nest. Only then does the ant realize it has not succeeded, and it begins to walk in successively larger loops to find its way home.

D. Whether it is trying to get back to the anthill or the train station, any animal using path integration must keep track of its own movements so it knows, while returning, which segments it has already completed. As you move, your brain gathers data from your environment--sights, sounds, smells, lighting, muscle contractions, a sense of time passing--to determine which way your body has gone. The church spire, the sizzling sausages on that vendor's grill, the open courtyard, the train station--all represent snapshots of memorable junctures during your journey.

E. In addition to guidance and path integration, we use a third method for finding our way. An office worker you approach for help on a Manhattan street corner might say: "Walk straight down Fifth, turn left on 47th, turn right on Park, go through the walkway under the Helmsley Building, then cross the street to the MetLife Building into Grand Central." This strategy, called route following, uses landmarks such as buildings and street names, plus directions--straight, turn, go through--for reaching intermediate points. Route following is more precise than guidance or path integration, but if you forget the details and take a wrong turn, the only way to recover is to backtrack until you reach a familiar spot, because you do not know the general direction or have a reference landmark for your goal. The route-following navigation strategy truly challenges the brain. We have to keep all the landmarks and intermediate directions in our head. It is the most detailed and therefore most reliable method, but it can be undone by routine memory lapses. With path integration, our cognitive memory is less burdened; it has to deal with only a few general instructions and the homing vector. Path integration works because it relies most fundamentally on our knowledge of our body's general direction of movement, and we always have access to these inputs. Nevertheless, people often choose to give route-following directions, in part because saying "Go straight that way!" just does not work in our complex, man-made surroundings.

F. Road Map or Metaphor? On your next visit to Manhattan you will rely on your memory to get around. Most likely you will use guidance, path integration and route following in various combinations. But how exactly do these constructs deliver concrete directions? Do we humans have, as an image of the real world, a kind of road map in our heads--with symbols for cities, train stations and churches; thick lines for highways; narrow lines for local streets? Neurobiologists and cognitive psychologists do call the portion of our memory that controls navigation a "cognitive map." The map metaphor is obviously seductive: maps are the easiest way to present geographic information for convenient visual inspection. In many cultures, maps were developed before writing, and today they are used in almost every society. It is even possible that maps derive from a universal way in which our spatial-memory networks are wired.

G Yet the notion of a literal map in our heads may be misleading; a growing body of research implies that the cognitive map is mostly a metaphor. It may be more like a hierarchical structure of relationships. To get back to Grand Central, you first envision the large scale--that is, you visualize the general direction of the station. Within that system you then imagine the route to the last place you remember. After that, you observe your nearby surroundings to pick out a recognizable storefront or street corner that will send you toward that place. In this hierarchical, or nested, scheme, positions and distances are relative, in contrast with a road map, where the same information is shown in a geometrically precise scale.

Questions 15–19

Use the information in the passage to match the category of each navigation method (listed A–C) with correct statement.
Write the appropriate letters A–C in boxes 15–19 on your answer sheet.
NB you may use any letter more than once

AGuidance
BPath integration.
CRoute following

15Using basic direction from starting point and light intensity to move on.
16Using combination of place and direction for destination.
17Using a well-known building near your destination as orientation.
18Using a retrace method from a known place if a mistake happens.
19Using a passed spot as reference for a new integration.

Questions 20–22

Choose the correct letter, A, B, C or D.
Write your answers in boxes 20–22 on your answer sheet.

20 What does the ant of Cataglyphis respond if it has been taken to another location ?
A Changes orientation sensors improvingly
B Releases biological scent for help from others
C Continues to move by the original orientation
D Totally gets lost once disturbed

21 Which of the following is true about "cognitive map" in this passage?
A There is no obvious difference contrast by real map
B It exists in our head and always correct
C It only exists under some cultures
D It is managed by brain memory

22 Which of following description of way findings correctly reflects the function of cognitive map?
A It visualizes a virtual route in a large scope
B It reproduces an exact details of every landmark
C Observation plays a more important role
D Store or supermarket is a must in the map

Questions 23–27

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

In boxes 23–27 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

23 Biological navigation has a state of flexibility.
24 You will always receive good reaction when you ask direction.
25 When someone follows a route, he or she collects comprehensive perceptional information in mind on the way.
26 Path integration requires more thought from brain compared with route-following.
27 In a familiar surrounding, your head will automatically figure out an exact map of where you are.

Reading passage 1418s1

Agriculture and Tourism

题目答案

1 A
2 B
3 C
4 C
5 A
6 B
7 D
8 benefit
9 survey
10 three
11 cooperation
12 experience
13 incomes

Reading passage 1429s2

Malaria in Italy

题目答案

14 Insect
15 Unclean air
16 Life expectancy
17 Hereditary
18 YES
19 NG
20 NO
21 YES
22 E
23 G
24 B
25 F
26 C
27 A

Reading passage 1331s1

farming practice in africa

题目答案

1 need
2 ashes
3 cassava
4 women
5 houses
6 C
7 B
8 A
9 A
10 YES
11 NO
12 NOT GIVEN
13 C

Reading passage 15230s1

Roller Coaster

题目答案

1 chain
2 loop
3 gear
4 simple motor/motor
5 ice
6 waxed slides
7 melt
8 wheels
9 coal
10 steam engine
11 NOT GIVEN
12 YES
13 YES

Reading passage 15156s2

Monkeys and Forests

题目答案

14 fruit
15 (deadly) poisons
16 leaf nutrients
17 reproduce
18 drought
19 D
20 F
21 B
22 A
23 C
24 C
25 A
26 D

Reading passage 15239s1

The History of Telegraph

题目答案

1 T
2 F
3 NG
4 NG
5 T
6 insulted cables
7 gutta percha
8 seaweed
9 President Buchanan
10 increasing voltage
11 camels
12 rains/tropical rains/flood
13 several months

Reading passage 15281s3

Mechanisms of Linguistic Change

题目答案

27 sound laws
28 fashion
29 principle of ease
30 FALSE
31 TRUE
32 TRUE
33 NOT GIVEN
34 FALSE
35 TRUE
36 NOT GIVEN
37 TRUE
38 C
39 D
40 A

Reading passage 1334s3

What Accounts for Knowledge

题目答案

27 (bad) cough
28 blood pressure
29 expert
30 diagnosis
31 explanation
32 friends and families
33 E
34 F
35 H
36 H
37 J
38 J
39 C
40 B

Reading passage 15233s3

Company Innovation

题目答案

Questions 28–33

28 F

29 C

30 G

31 B

32 F

33 E

Questions 34–37

34 T

35 NG

36 F

37 T

Questions 38–40

38 C

39 A

40 D

Reading passage 15113s3

What Dreams Are Made Of

题目答案

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

Reading passage 1436s2

Antarctica–in from the cold

题目答案

14 D
15 E
16 F
17 C
18 A
19 C
20 A
21 B
22 B
23 D
24 C
25 A
26 C

Reading passage 1328s1

Classifying Society

题目答案

1 True
2 NOT GIVEN
3 FALSE
4 FALSE
5 TRUE
6 TRUE
7 NOT GIVEN
8 Specific activities
9 nomadic
10 grouped/grouped together
11 foodstuffs
12 5000
13 craft specialists

Reading passage 1417s1

Foot Pedal Irrigation

题目答案

1 FALSE
2 NOT GIVEN
3 FALSE
4 NOT GIVEN
5 TRUE
6 TRUE
7 several hours
8 bamboo
9 cylinders
10 piston
11 7
12 half an acre
13 corrugated tin
14 $37.5 million

Reading passage 1424s2

Mammoth Kill

题目答案

15 hunting
16 overkill model
17 disease
18 empirical evidence
19 climatic instability
20 geographical ranges
21 Younger Dryas event
22 A
23 B
24 A
25 B
26 B
27 C

Reading passage 1405s2

Memory and Age

题目答案

14 E
15 B
16 A
17 C
18 memory-notorious
19 psychological
20 semantic memory
21 episodic memory/event memory
22 algebra
23 the vocabulary/vocabulary
24 C
25 D
26 B
27 C

Reading passage 15283s1

The Diagnose of Bridge

题目答案

1 D
2 E
3 C
4 I
5 B
6 B
7 A
8 C
9 A
10 two steel girders
11 accelerometer/conventional accelerometer
12 slot
13 flange

Reading passage 1323s2

The British Bittern

题目答案

15 ii
16 v
17 viii
18 i
19 vi
20 iii
21 iv

21 (in the)1950s
22 shy
23 starvation
24 fish (prey)
26 otter

27 B

Reading passage 1343s1

songs of stones

题目答案

1 NOT GIVEN
2 TRUE
3 FALSE
4 NOT GIVEN
5 TRUE
6 TRUE
7 TRUE

8 Stonemason
9 Gian Giorgio Trissino
10 Inigo Jones
11 Temple (architecture)
12 Quattro Libri dell'Architettura
13 benevolent calm

Reading passage 15240

Charles Darwin's theory and Finches

题目答案

1 drought
2 large seeds
3 heavy rains
4 small seeds
5 wetter weather
6 smaller bills
7 medium-sized bills
8 rice
9 FALSE
10 NOT GIVEN
11 TURE
12 FALSE
13 TURE

Reading passage 15299s1

Choices and Happiness

题目答案

1 B
2 D
3 A
4 C
5 FALSE
6 NOT GIVEN
7 TRUE
8 FALSE
9 TRUE
10 B
11 A
12 D
13 C

Reading passage 1336s3

Talc Powder

题目答案

27 C
28 C
29 B
30 A
31 B
32 C
33 20
34 foam
35 waste water
36 biodegrade
37 harmful
38 droplets
39 lamination and packing
40 grape growers

Reading passage 15144s2

The History of “Farmer”

题目答案

14 E
15 B
16 G
17 D
18 H
19 mail-order company
20 chain store
21 buying offices
22 celebration
23 big family
24 B
25 C
26 A

Reading passage 1324s2

Theory of Mind in Children

题目答案

14 F
15 C
16 D
17 A
18 B
19 D
20 G
21 Theory of mind/ TOM/ Children’s TOM
22 chocolate
23 information
24 four/4
25 older
26 adults
27 challenging

Reading passage 10131s3

Paper or Computer

题目答案

27 iv
28 iii
29 viii
30 ii
31 ix
32 vii
33 i
34 flexible
35 tangible
36 tailorable
37 C
38 A
39 A
40 D

Reading passage 12113s1

Extinction Mysterious of The Dinosaurs

题目答案

1 NO
2 YES
3 NOT GIVEN
4 YES
5 NO
6 YES
7 ecological release
8 competitors
9 dragons
10 overlooked
11 vanished
12 recycled
13 misdated

Reading passage 12312s1

Education Philosophy of Children

题目答案

1 iv
2 v
3 i
4 vi
5 A
6 B
7 B
8 C
9 B
10 A
11 C
12 A
13 D

Reading passage 1446s2

Western Immigration of Canada

题目答案

15 ii
16 iv
17 x
18 vi
19 i
20 vii
21 xii
22 homesteads
23 agricultural output
24 wheat
25 company
26 police force
27 transcontinental railway

Reading passage 1413s1

Proto-Writing

题目答案

1 B
2 D
3 A
4 C
5 H
6 C
7 D
8 NOT GIVEN
9 TRUE
10 FALSE
11 TRUE
12 NOT GIVEN
13 TRUE

Reading passage 13166s2

Making Copies

题目答案

14 FALSE
15 NOT GIVEN
16 NOT GIVEN
17 FALSE
18 TRUE
19 TRUE
20 Model A
21 (Patent) attorney
22 corporations
23 commercial triumph
24 Possession/toy typewriter
25 inventor
26 charities

Reading passage 15123s2

Human Navigation–Finding Our Way

题目答案

15 B
16 C
17 A
18 C
19 B
20 C
21 D
22 A
23 TRUE
24 NOT GIVEN
25 TRUE
26 FALSE
27 NOT GIVEN