ISTRUZIONI PER I CANDIDATI

Leggete attentamente le istruzioni. Non tralasciate nulla.

Non voltate le pagine e non iniziate a risolvere gli esercizi prima del via dell’insegnante preposto.

Le risposte scritte con la matita si valutano con zero (0) punti.

Incollate oppure scrivete il vostro codice (nella casella in alto a destra su questo foglio e sul foglio per le risposte).

La prova consiste di due parti, la parte A e la parte B. Il tempo a disposizione è di 80 minuti complessivi: 40 minuti per la parte A e 40 minuti per la parte B. L’insegnante responsabile Vi informerà quando potrete iniziare a risolvere la parte B. Non è consigliabile tornare alla parte A.

La prova contiene tre esercizi nella parte A e tre esercizi nella parte B. Ogni risposta esatta si valuta con un (1) punto.

Scrive sul foglio per le risposte negli appositi spazi usando la penna stilografica o la penna a sfera e annerite con la matita le rispettive caselle. Scrivete in modo leggibile. Se sbagliate, cancellate la risposta e riscrivetela. Le risposte illeggibili e le correzioni non chiare si valutano con zero (0) punti.

Abbiate fiducia in voi stessi e nelle vostre capacità.
Buon lavoro.

Questa prova d’esame ha 12 pagine, di cui 2 vuote.
A: COMPRENSIONE DI TESTI SCRITTI (Durata: 40 minuti)

READING TASK 1: SHORT ANSWERS

Answer in note form in the spaces provided on the answer sheet.

Example:
0. Where is the birthplace of hurricanes?  
   Africa.

Riders on the storm

1. Why is weather forecasting for Africa unreliable?
2. Who co-operated with Dr Thorncroft and Dr Parker?
3. Why is the jet changeable?
4. Who does Thorncroft compare the cyclone with?
5. What is crucial for a cyclone to grow into a hurricane?
6. Where does the cyclone weaken?
7. What makes regular weather observation across countries impossible?
The fantasy is to be there when a hurricane is forming, says Doug Parker, from the University of Leeds. He and colleague Chris Thorncroft, from Reading University, have just returned from the birthplace of hurricanes. Their aim was to discover what turns a stiff breeze into a devastating cyclone.

Hurricanes are born over the plains and mountains of Central and West Africa from what is known as the African easterly jet, a jet of air moving east to west, which can sometimes end up in America with horrifying consequences. There is another equally important reason for investigating the African easterly jet: there is still no decent weather forecasting system that can predict when a drought or a monsoon will hit Africa, nor even how the jet affects daily weather patterns. “At the moment we don’t have much of a clue because there’s so few data going in to the models,” says Thorncroft.

Dr Thorncroft and Dr Parker, along with an RAF crew and a team of scientists from the Met Office collected data on pressure, temperature, humidity and wind speed between Cape Verde and Niamey in Niger by dropping 110 data gathering instruments attached to mini parachutes from a Hercules aircraft called Snoopy. Each one radioed back the information; at nearly £500 a pop, it’s not cheap, but they hope to generate crucial information about hurricane formation.

The jet is spawned west of the Ethiopian highlands and is inherently unstable because of the difference in temperature of the lands it is travelling over: it could be as hot as 40°C over the Sahara, through to 26°C around coastal regions. When the cool, moist air from the Atlantic meets hot desert air, there is an unequal distribution of pressure causing waves to form. These waves are swept along by the remainder of the jet: they can be up to 3,000km long.

There are a number of factors which change the wave from a benign weather system to something rather more sinister. One of the main factors is the temperature of the sea. If the wave is very low down, about a kilometre from the ground, it can grow by extracting energy from the warm ocean. Heat travels from the ocean to the wave, warming it and causing the wave to break off and begin to spiral in a vortex pattern. As the centre warms and increases in energy, more air is sucked in.

“It’s like ice skaters bringing their arms in so that they spin faster,” explains Thorncroft.

The faster the cyclone spins, the more heat it draws from the ocean. The cyclone travels across the sea towards America picking up speed and energy and can grow large enough to become a hurricane. What can stop it is vertical shear – a strong difference in wind speed between upper and lower levels. The current theory is that the temperature of the sea can be used to predict the maximum intensity of a cyclone, and although Thorncroft thinks this is a factor, he believes that the degree of vertical shear is also crucial. Once the cyclone gets to the US, it loses energy when it hits the land; even a hurricane will eventually fizzle out. Some head north and interact with weather systems from Europe. A big hurricane may reach the UK and can have a significant impact on wind and rainfall.

Thorncroft and Parker hope that their data will not only help predict hurricane formation and drought patterns in Africa, but could also be used to update the current models. By making forecasts using European models with and without the data the team is gathering, it will be possible to see how accurate the models are, and if they can be improved.

“It’s the responsibility of every country to make observations and share them globally,” says Thorncroft. “But if our data had a major impact on hurricane prediction and on understanding tropical weather systems, would anyone want to pay to collect data routinely? It’s in the interest of everyone,” he adds. This may be, but obtaining global funding and co-operation could prove as difficult as getting an accurate weather forecast.
READING TASK 2: MATCHING (Paragraphs and Statements)

Match all statements 1–10 with paragraphs from A–H.

MORE THAN ONE STATEMENT may refer to THE SAME PARAGRAPH.

Write your answers on the answer sheet and shade in the appropriate circle.

Example:
0. The ancient states were forced to occupy more and more lands.

Doomed civilisations

1. A regular supply of water was crucial for the Mayan crop planting system.

2. The ruins left by past societies have always been considered as signs of progress.

3. The Mayan civilisation collapsed because they cut down too many trees.

4. Even in the past, man was causing a lot of damage to the environment.

5. Some Mayan cities were exposed to hunger because of their location.

6. European invaders contributed to the collapse of one culture in South America.

7. Some people might associate the disappearance of early civilisations with divine punishment.

8. A recent American theory says the collapse of the Mayan society was due to lack of water.

9. The Mayan cities were found hidden in the jungle.

10. The obvious explanation of the fall of a civilisation is not necessarily correct.
Doomed civilisations
Adapted from an article in The Guardian, 24 May 2001, by Sanjida O’Connell

In the 1830s, explorers John Lloyd Stephens and Frederick Catherwood "rediscovered" the Mayan cities of South America. Here was the archetypal picture of a great "lost" civilisation, its abandoned monuments submerged by the encroaching jungle.

"It's a very evocative image when you have cities that have transparently undergone some Sodom and Gomorrah-like cataclysm. Some might even think it is a judgment from God," says Dr Chris Scarre, an archaeologist from the McDonald Institute, Cambridge University.

Last week, US scientists proposed that cyclic, extended drought pulled down the Mayan civilisation around 900 AD. Many archaeologists believe that environmental events destroyed civilisations that had reached their cultural peak. Dr Scarre is not convinced. He believes many of the great civilisations of the world and held within them the seeds of their own destruction.

The impressive monuments left behind by early societies have encouraged the idea that they are advancements – the culmination of progress from hunter-gatherers to farmers and finally to civilisation. However, these events show cyclical patterns of growth, maturity and decline. They can also be seen as pathologies, damaging to the natural world, and subject to the same processes of population pressure and ecological deterioration that has become such a problem to everyone.

Many states were only able to survive under conditions of continuous territorial growth. The Roman empire thrived on expansion which provided career opportunities for ambitious generals, huge profits for entrepreneurs, and a ready source of slaves. Once the empire had to forgo this policy and withdraw to more defensible frontiers, the system became increasingly difficult to sustain. Constant pressure for expansion also afflicted the Inca state. Each ruler had to build up personal estates of his own which he could only do through military conquest. The pressures for continuous expansion were thus enormous, and the system would have collapsed even if the Spanish conquistadors had not arrived in 1532.

The Maya are the classic lost civilisation. It is thought that their destruction was the result of food shortages between the 9th and 10th century AD. Several of the lowland cities, such as Tikal, depended heavily on the cultivation of raised fields set in marshy depressions known as bajos, which flood intermittently but may originally have been permanent lakes. Stable water levels were essential to this system. But we know that they suffered a dry period for several thousand years. As a result, the water levels would have fallen and the raised fields become unusable and this could only have led to famine and political unrest.

"It's easy to say, well you have a collapse of a society, an abandonment of urban centres, the cessation of building monuments and then we have here an environmental event which would neatly explain it: drought, degradation of soil, or the rise or fall of the water table. There's a very strong temptation to join the dots and think, so there's your answer – but human societies aren't like that," says Dr Scarre. He has an alternative hypothesis.

Between the 8th and 9th century Mayan cities were intensively competitive. To fund the building of monuments, they cleared forest from hillsides to increase the area they could cultivate. The hills eroded, soil was washed into the lowland bajos, silt ing them up. The hill slopes degraded too badly to plant crops on them and the silt damaged the intensive cultivation in the bajos. The deforestation and soil erosion ultimately may have destroyed the capacity of the land to support the high population levels in the Mayan cities and led to collapse.

© The Guardian
READING TASK 3: TRUE / FALSE / NOT GIVEN

Decide whether the following statements are TRUE / FALSE or NOT GIVEN.

Tick (✓) the appropriate column on your answer sheet and shade in the appropriate circle.

Example:

0. Manga can be compared to western comics.

Comic relief

1. Manga authors show how the Japanese really think.

2. Businessmen criticise the financial mangas.

3. The weekly Young sells more copies than Shonen Jump.

4. UK teen magazines are more censored than Japanese.

5. There are three manga superstores in Tokyo.


7. Tezuka's manga characters have western body features.

8. The 70s favoured mangas inspired by Japanese culture.

9. Modern manga conventions have remained the same.

10. Male manga artists are gaining ground against female.
As you detach yourself from the tide of bodies flowing down pretty much any Tokyo pavement, you'll see the mangas sitting in neat piles outside newsagents and general stores. They look like comics, and visiting Westerners often mistakenly refer to them as such. But these are not comics; to millions of Japanese readers, they are portals to a parallel universe. The literal translation of manga is 'irresponsible writing'. If you want to know what's really going on in the minds of Japanese people, this is the place to look.

At home, manga artists are treated like rock stars. They are wealthy and celebrated and teenagers dream of emulating them, because they've beaten the system, made a mockery of the endless hours of homework and graft that shape most people's weeks. It is estimated that 10 per cent of all books and magazines published in Japan are mangas. On the subway during rush hour you will see pinstriped businessmen reading financial manga, in which chisel-jawed players storm into boardrooms and avert corporate meltdown at the 11th hour. On the stands, sports, cookery and kids' editions sit next to piles of the voluminous teen weeklies such as *Young and Shonen Jump*. The latter can be 3 inches thick and are claimed to sell up to 5m copies per issue. Inside, there will be lengthy stories centred around anything from dealers in fake antiques to rival gangs of cheerleaders. There are also plenty of hyperreal adult tales of hardware-encrusted space travellers and, in the ones aimed at teenage boys, lots of warped, adolescent sex of a sort that wouldn't be acceptable in UK teen mags. 'It's tolerated on the page because it's escapism,' says the editor of one such title.

It's not until you enter one of the manga superstores, however, that you come to appreciate the extraordinary breadth of manga culture. Comic Station Shibuya is arranged on three floors and claims to house 120,000 different mangas.

Ask why comics and the animated ('anime') films they spawn are so popular, and you'll get a variety of responses. Some artists will point out that the Japanese 'alphabet' is pictorial rather than phonetic, meaning that the population is brought up to think in terms of pictures rather than syntax.

Mamoru Oshii, who directed the film adaptation of the Ghost in the Shell series, has a more sombre take on the whole thing. 'I don't think Japanese people could get through life without distractions such as manga,' he suggests. 'Their houses are tiny, the country is small, but with so many people. Japan is a tough place to live, so people can live in the world of manga for a while and it makes their daily life a bit more tolerable. It's like a Walkman – you cut the world out, it's a means of escape.'

The conventions of modern manga were laid down in the 20 years after the Second World War by a man named Osamu Tezuka, who was besotted with Disney. This is said to explain why most of its heroes are Caucasian in appearance, with saucer-like eyes and extravagantly long legs. In the 70s, as political radicalism swept across Japan's campuses, there was a call for less reliance on American traditions. What appears now in manga is a mix of the two cultures, although there is still a bias towards idealised Western-looking women, just as there is a clear taste for Western models in advertising.

It's hardly surprising, then, that the only place where manga conventions are regularly broken is in the women's sector. On an average visit to Comic Station Shibuya, 70 per cent of the customers might be female. Some carry armfuls of shojo manga, the beautifully drawn, romantically inclined stuff which is aimed at girls, but others browse the work of female artists such as Rumiko Takahashi – one of the most revered of all the manga artists, a multi-millionaire with an estimated 80m books in print. Junco Ito suggests that manga is one of the few areas of Japanese life where women can compete with men on an equal footing.
Life on Mars hopes after ice find
Adapted from an article in The Observer, 3 March 2002, by Robin McKie

Massive fields of ice have been discovered on Mars, raising hopes that the Red Planet could support life. The speed and extent of the discovery of water has stunned scientists who had only just directed instruments on the US Mars Odyssey spacecraft towards the planet. The data they received is the strongest indication yet that the planet once harboured life, and may still support today.

"The signal we're getting is loud and clear. We're not just looking surface frost. There's lots of ice on Mars," said Stephen Saunders, project scientist for Odyssey.

Water is the matrix of life. It, biology is impossible. Hence, scientists' joy at finding large amounts in the planet's southern hemisphere. "This is very good news," said Prof Colin Pillinger, leader of Britain's Beagle 2 mission, aims to land a robot-probe on Mars next year. "Wherever you find water on Earth, you find life. This discovery has to be very encouraging."

Odyssey is the first spacecraft to reach Mars since two planetary probes were destroyed during final approaches to the planet in 1999. It is designed conduct the first chemical analysis of the entire Martian surface. The craft – launched on 7 April from Cape Canaveral – reached Mars in October and has been slowly manoeuvring itself into a low orbit then. Last week, scientists turned their instruments and began surveying the planet. Within hours they were rewarded with reams of data, including strong evidence of water. Such early results are unprecedented in mission of this nature.

"We have a whopping signal," said Arizona University's William Boynton who directs the probe's water-detectors. "It blew away."

Odyssey uses three different devices to determine the chemical constituents of Martian soil. The planet's surface is bombarded cosmic rays, and each chemical constituent of its soil emits a high-energy sub-atomic particle when struck by such radiation. Each chemical produces a particle of a particular type and energy, and this acts a signature for its presence.

All three water-detectors on Odyssey have observed substantial amounts of water in the Martian soil. "The fact we see a clear signature ice from three different instruments makes the conclusion that are significant amounts a sound one," said Boynton.

© The Observer
TASK 2: GAP FILL

Write the correct form of the verb given in brackets in the spaces provided on your answer sheet.

There is an example at the beginning: Gap 0.

A fine balance

Adapted from an article in The Observer, 3 March 2002, by Juliet Shedden

One of the first beneficiaries of Whitbread's work-life balance scheme, Wendy Johnson __0__ [was invited] to come back to work part-time after the birth of her first child. She says that if she __1__ (NOT / OFFER) that chance, things would have been very different.

'I __2__ (NOT / PLAN) to come back,' she says, 'but one day I __3__ (CALL) by one of my colleagues and asked if I would be interested in some part-time work for two days a week back in my old department.' She jumped at her chance. Since her return, Johnson says she __4__ (NOTICE) that many of her colleagues are also on part-time contracts and that there has been a noticeable growth in the number of people working as part of job-sharing schemes. 'When I initially __5__ (COME) back to work, it was just part-time, two days a week. I now do a job share, three days a week.'

She works in the strategic development division, __6__ (SHARE) the responsibility for the acquisition of new hotels, and finds the role fulfilling. Thanks to the work-life balance scheme, Johnson is now able to enjoy what she calls 'the best of both worlds'. She feels that three days in the office is a long enough period to get properly involved in projects and keep in tune with what is happening in the department.

'It's great. You keep your hand in, you learn new technology and update your skills,' she says. It's also good for Whitbread because if people __7__ (NOT / COME) back part-time the company can lose the skills and information that people carry with them through years of service.'

Johnson thinks Whitbread has been flexible and taken care to work within her individual needs and requirements. 'They __8__ (ADAPT) to my needs as far as they can. They make compromises. Should you ever need __9__ (LEAVE) early, say your child is poorly, there is never a problem. They don't give you a hard time about it. They are very good.'

In her days off work, Johnson __10__ (USE) her spare time for her own leisure. And working part-time gives her a lot more quality time with her daughter. She can pick her up from school on the days she is at home and take her swimming on Mondays after school. Johnson feels loyal to the company because it has given her valuable flexibility in her working hours. She is motivated by the lengths the company goes to keeping her informed about what __11__ (GO ON).

Johnson believes the company has worked hard at __12__ (MOTIVATE) her. 'I __13__ (ENCOURAGE) to use my initiative and to go on training courses for Power Point and Excel: the basic products the company use.'

She can't see herself going back to work full-time because she feels she __14__ (FIND) the ideal working conditions. For the immediate future, she says, she would like to stay as a part-timer. She is confident that when her daughter __15__ (BE) older, should she change her mind, she has an employer to whom she can go and ask to work full-time again.

© The Observer
Black arts flourishing among the black-eyed beans

Adapted from an article in The Observer, 3 March 2002, by Neasa MacErlane

0) IMPULSE If you are an __0__ [impulsive] buyer who spends more than £100 a week in supermarkets, you are exactly the sort of person they want to keep coming back. The layout, pricing and even the smell of the store is designed with you in mind. But if you are frugal, live alone and buy only what's on your list,

1) PROFITABLE you're an __1__ shopper who leaves them cold.

This is the time of year when the supermarkets launch major offensives to increase their market share. They know that many shoppers tightened their belts after overspending at Christmas so the big names each try to demonstrate their attractiveness.

Although the proportion of our incomes spent on food has fallen from a third to a sixth over the last 50 years, according to __2__ statistics, we still __3__ spend between £25 and £32 a week each on it. Even single pensioners earmark 19% of their total weekly spending – £26.40 – for groceries, says the 2002 Social Trends survey, though other single adults spend as little as £3.20, or 12%.

2) OFFICE Tesco, hailed 'the best __4__ in Britain in food and anything else' by retail research group Verdict, announced price cuts totalling £70m on 1,500 products last month. 'This will be followed by many more __5__ from all the other supermarkets, and they will be __6__,' says Richard Hyman, chairman of Verdict.

3) TYPICAL It is not quite as simple as that, however. Tesco admitted on its website that it had increased 1,750 prices since Christmas. It defended these rises – including 200 on __7__ drinks alone – by saying many resulted from special offers coming to an end.

A supermarket pricing is a spectacular black art. With hundreds of stores, thousands of products and suppliers, and millions of customers, there is a vast range of __8__ for the sales teams. And the extraordinary thing is that the supermarkets seem to keep their customers happy. In its consumer research, the magazine Which? has always found the same result: 'Our surveys have consistently shown that customers have few __9__ about supermarket service and quality.'

4) RETAIL Even so, there are variations in the images of the major stores. In its latest survey Which? found that shoppers rated Asda head and shoulders above the others in terms of 'low prices' and 'value for money'. The more upmarket

5) ANNOUNCE Waitrose was second for value but unbeatable for quality and __10__ the researchers found.

© The Observer
PAGINA VUOTA
PAGINA VUOTA