READING PASSAGE 1

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

AIRPORTS ON WATER

River deltas are difficult places for map makers. The river builds them up, the sea wears them down; their outlines are always changing. The changes in China's Pearl River delta, however, are more dramatic than these natural fluctuations. An island six kilometres long and with a total area of 1248 hectares is being created there. And the civil engineers are as interested in performance as in speed and size. This is a bit of the delta that they want to endure.

The new island of Chek Lap Kok, the site of Hong Kong's new airport, is 83% complete. The giant dumper trucks rumbling across it will have finished their job by the middle of this year and the airport itself will be built at a similarly breakneck pace.

As Chek Lap Kok rises, however, another new Asian island is sinking back into the sea. This is a 520-hectare island built in Osaka Bay, Japan, that serves as the platform for the new Kansai airport. Chek Lap Kok was built in a different way, and thus hopes to avoid the same sinking fate.

The usual way to reclaim land is to pile sand rock on to the seabed. When the seabed oozes with mud, this is rather like placing a textbook on a wet sponge: the weight squeezes the water out, causing both water and sponge to settle lower. The settlement is rarely even: different parts sink at different rates. So buildings, pipes, roads and so on tend to buckle and crack. You can engineer around these problems, or you can engineer them out. Kansai took the first approach; Chek Lap Kok is taking the second.

The differences are both political and geological. Kansai was supposed to be built just one kilometre offshore, where the seabed is quite solid. Fishermen protested, and the site was shifted a further five kilometres. That put it in deeper water (around 20 metres) and above a seabed that consisted of 20 metres of soft alluvial silt and mud deposits. Worse, below it was a not-very-firm glacial deposit hundreds of metres thick.

The Kansai builders recognised that settlement was inevitable. Sand was driven into the seabed to strengthen it before the landfill was piled on top, in an attempt to slow the process; but this has not been as effective as had been hoped. To cope with settlement, Kansai's giant terminal is supported on 900 pillars. Each of them can be individually jacked up, allowing wedges to be added underneath. That is meant to keep the building level. But it could be a tricky task.

Conditions are different at Chek Lap Kok. There was some land there to begin with, the original little island of Chek Lap Kok and a smaller outcrop called Lam Chau. Between them, these two outcrops of hard, weathered granite make up a quarter of the new island's surface area. Unfortunately, between the islands there was a layer of soft mud, 27 metres thick in places.

According to Frans Uiterwijk, a Dutchman who is the project's reclamation director, it would have been possible to leave this mud below the reclaimed land, and to deal with the resulting settlement by the Kansai method. But the consortium that won the contract for the island opted for a more aggressive approach. It assembled the worlds largest fleet of dredgers, which sucked up l50m cubic metres of clay and mud and dumped it in deeper waters. At the same time, sand was dredged from the waters and piled on top of the layer of stiff clay that the massive dredging had laid bare.

Nor was the sand the only thing used. The original granite island which had hills up to 120 metres high was drilled and blasted into boulders no bigger than two metres in diameter. This provided 70m cubic metres of granite to add to the island's foundations. Because the heap of boulders does not fill the space perfectly, this represents the equivalent of 105m cubic metres of landfill. Most of the rock will become the foundations for the airport's runways and its taxiways. The sand dredged from the waters will also be used to provide a two-metre capping layer over the granite platform. This makes it easier for utilities to dig trenches - granite is unyielding stuff. Most of the terminal buildings will be placed above the site of the existing island. Only a limited amount of pile-driving is needed to support building foundations above softer areas.

The completed island will be six to seven metres above sea level. In all, 350m cubic metres of material will have been moved. And much of it, like the overloads, has to be moved several times before reaching its final resting place. For example, there has to be a motorway capable of carrying 150-tonne dump-trucks; and there has to be a raised area for the 15,000 construction workers. These are temporary; they will be removed when the airport is finished.

The airport, though, is here to stay. To protect it, the new coastline is being bolstered with a formidable twelve kilometres of sea defences. The brunt of a typhoon will be deflected by the neighbouring island of Lantau; the sea walls should guard against the rest. Gentler but more persistent bad weather - the downpours of the summer monsoon - is also being taken into account. A mat-like material called geotextile is being laid across the island to separate the rock and sand layers. That will stop sand particles from being washed into the rock voids, and so causing further settlement This island is being built never to be sunk.

Classify the following statements as applying to
    A *Chek Lap Kok airport only*
    B *Kansai airport only*
    C *Both airports*

Write the appropriate letters A-C in boxes 1-5 on your answer sheet.

Example	*Answer*
built on a man-made island	**C**

1   having an area of over 1000 hectares

2   built in a river delta

3   built in the open sea

4   built by reclaiming land

5   built using conventional methods of reclamation

***Complete the** labels on Diagram B below.*
*Choose your answers from **the** box below the diagram and write them in boxes 6-9 on your*
***answer** sheet.*

NB *There* *are more words/phrases than spaces, so you will not use them all.*

DIAGRAM A
    Coses-section of the original area around Chek Lap Kok before work began
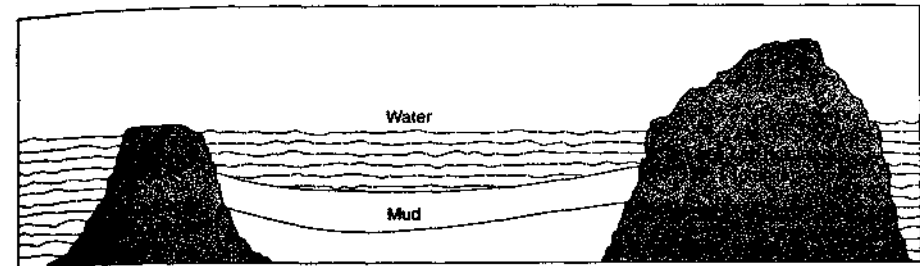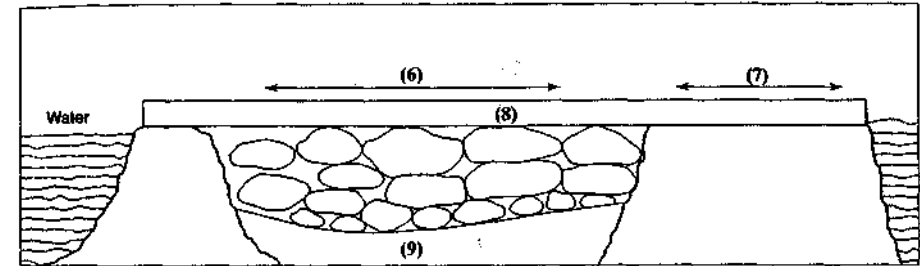

DIAGRAM B
Cross-section of the same area at the time the article was written

granite	runways and taxiways
mud	water
terminal building site	stiff clay
sand	

Complete the summary below.
Choose your answers from the box below the summary and write them in boxes 10-13 on your answer sheet.

NB There are more words than spaces, so you will not use them all.

	Answer
When the new Chek Lap Kok airport has been completed, the raised area and the ... *(Example)* ... will be removed.'.	**motorway**

The island will be partially protected from storms by ... (10)... and

also by ... (11) ... . Further settlement caused by ... (12) ... will be

prevented by the use of ... (13)....

construction workers	coastline	dump-trucks
geotextile	Lantau Island	motorway
rainfall	rock and sand	rock voids
sea walls	typhoons	

READING PASSAGE 2

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

on the following pages.

Questions 14-18

Reading passage 2 has six paragraphs B-F from the list of headings below
Choose *the most suitable headings for paragraphs B-F from the list of headings below.*
*Write the appropriate numbers (**i-ix**) in boxes 14-18 on your answer sheet.*

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

List of Headings

i	Ottawa International Conference on Health Promotion
ii	Holistic approach to health
iii	The primary importance of environmental factors
iv	Healthy lifestyles approach to health
v	Changes in concepts of health in Western society
vi	Prevention of diseases and illness
vii	Ottawa Charter for Health Promotion
viii	Definition of health in medical terms
ix	Socio-ecological view of health

Example		*Answer*
Paragraph	**A**	*

14 Paragraph B

15 Paragraph C

16 Paragraph D

17 Paragraph E

18 Paragraph F

Changing our Understanding of Health

A

The concept of health holds different meanings for different people and groups. These meanings of health have also changed over time. This change is no more evident than in Western society today, when notions of health and health promotion are being challenged and expanded in new ways.

B

For much of recent Western history, health has been viewed in the physical sense only. That is, good health has been connected to the smooth mechanical operation of the body, while ill health has been attributed to a breakdown in this machine. Health in this sense has been defined as the absence of disease or illness and is seen in medical terms. According to this view, creating health for people means providing medical care to treat or prevent disease and illness. During this period, there was an emphasis on providing clean water, improved sanitation and housing.

C

In the late 1940s the World Health Organisation challenged this physically and medically oriented view of health. They stated that 'health is a complete state of physical, mental and social well-being and is not merely the absence of disease' (WHO, 1946). Health and the person were seen more holistically (mind/body/spirit) and not just in physical terms.

D

The 1970s was a time of focusing on the prevention of disease and illness by emphasising the importance of the lifestyle and behaviour of the individual. Specific behaviours which were seen to increase risk of disease, such as smoking, lack of fitness and unhealthy eating habits, were targeted. Creating health meant providing not only medical health care, but health promotion programs and policies which would help people maintain healthy behaviours and lifestyles. While this individualistic healthy lifestyles approach to health worked for some (the wealthy members of society), people experiencing poverty, unemployment, underemployment or little control over the conditions of their daily lives benefited little from this approach. This was largely because both the healthy lifestyles approach and the medical approach to health largely ignored the social and environmental conditions affecting the health of people.

E

During 1980s and 1990s there has been a growing swing away from seeing lifestyle risks as the root cause of poor health. While lifestyle factors still remain important, health is being viewed also in terms of the social, economic and environmental contexts in which people live. This broad approach to health is called the socio-ecological view of health. The broad socio-ecological view of health was endorsed at the first International Conference of Health Promotion held in 1986, Ottawa, Canada, where people from 38 countries agreed and declared that:

> The fundamental conditions and resources for health are peace, shelter, education, food, a viable income, a stable eco-system, sustainable resources, social justice and equity. Improvement in health requires a secure foundation in these basic requirements. (WHO, 1986)

It is clear from this statement that the creation of health is about much more than encouraging healthy individual behaviours and lifestyles and providing appropriate medical care. Therefore, the creation of health must include addressing issues such as poverty, pollution, urbanisation, natural resource depletion, social alienation and poor working conditions. The social, economic and environmental contexts which contribute to the creation of health do not operate separately or independently of each other. Rather, they are interacting and interdependent, and it is the complex interrelationships between them which determine the conditions that promote health. A broad socio-ecological view of health suggests that the promotion of health must include a strong social, economic and environmental focus.

F

At the Ottawa Conference in 1986, a charter was developed which outlined new directions for health promotion based on the socio-ecological view of health. This charter, known as the Ottawa Charter for Health Promotion, remains as the backbone of health action today. In exploring the scope of health promotion it states that:

> Good health is a major resource for social, economic and personal development and an important dimension of quality of life. Political, economic, social, cultural, environmental, behavioural and biological factors can all favour health or be harmful to it. (WHO, 1986)

The Ottawa Charter brings practical meaning and action to this broad notion of health promotion. It presents fundamental strategies and approaches in achieving health for all. The overall philosophy of health promotion which guides these fundamental strategies and approaches is one of 'enabling people to increase control over and to improve their health' (WHO, 1986).

Questions 19-22

Using NO MORE THAN THREE WORDS from the passage, answer the following questions
Write your answers in boxes 19-22 on your answer sheet.

19   In which year did the World Health Organisation define health in terms of mental, physical and social well-being?

20   Which members of society benefited most from the healthy lifestyles approach to health?

21   Name the three broad areas which relate to people's health, according to the socio-ecological view of health.

22   During which decade were lifestyle risks seen as the major contributors to poor health?

Questions 23-27

Do the following statements agree with the information in Reading Passage 2?
In boxes 23-27 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 in the passsage*

23   Doctors have been instrumental in improving living standards in Western society.

24   The approach to health during the 1970s included the introduction of health awareness programs.

25   The socio-ecological view of health recognises that lifestyle habits and the provision of adequate health care are critical factors governing health.

26   The principles of the Ottawa Charter are considered to be out of date in the 1990s.

27   In recent years a number of additional countries have subscribed to the Ottawa Charter.

Reading passage 3

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

CHILDREN'S THINKING

One of the most eminent of psychologists, Clark Hull, claimed that the essence of reasoning lies in the putting together of two 'behaviour segments' in some novel way, never actually performed before, so as to reach a goal.

Two followers of Clark Hull, Howard and Tracey Kendler, devised a test for children that was explicitly based on Clark Hull's principles. The children were given the task of learning to operate a machine so as to get a toy. In order to succeed they had to go through a two-stage sequence. The children were trained on each stage separately. The stages consisted merely of pressing the correct one of two buttons to get a marble; and of inserting the marble into a small hole to release the toy.

The Kendlers found that the children could learn the separate bits readily enough. Given the task of getting a marble by pressing the button they could get the marble; given the task of getting a toy when a marble was handed to them, they could use the marble. (All they had to do was put it in a hole.) But they did not for the most part 'integrate', to use the Kendlers' terminology. They did not press the button to get the marble and then proceed without further help to use the marble to get the toy. So the Kendlers concluded that they were incapable of deductive reasoning.

The mystery at first appears to deepen when we learn, from another psychologist, Michael Cole, and his colleagues, that adults in an African culture apparently cannot do the Kendlers' task either. But it lessens, on the other hand, when we learn that a task was devised which was strictly analogous to the Kendlers' one but much easier for the African males to handle.

Instead of the button-pressing machine, Cole used a locked box and two differently coloured match-boxes, one of which contained a key that would open the box. Notice that there are still two behaviour segments — 'open the right match-box to get the key' and 'use the key to open the box' - so the task seems formally to be the same. But psychologically it is quite different, Now the subject is dealing not with a strange machine but with familiar meaningful objects; and it is clear to him what he is meant to do. It then turns out that the difficulty of 'integration' is greatly reduced,

Recent work by Simon Hewson is of great interest here for it shows that, for young children, too, the difficulty lies not in the inferential processes which the task demands, but in certain perplexing features of the apparatus and the procedure. When these are changed in ways which do not at all affect the inferential nature of the

problem, then five-year-old children solve the problem as well as college students did in the Kendlers' own experiments.

Hewson made two crucial changes. First, he replaced the button-pressing mechanism in the side panels by drawers in these panels which the child could open and shut. This took away the mystery from the first stage of training. Then he helped the child to understand that there was no 'magic' about the specific marble which, during the second stage of training, the experimenter handed to him so that he could pop it in the hole and get the reward.

A child understands nothing, after all, about how a marble put into a hole can open a little door. How is he to know that any other marble of similar size will do just as well? Yet he must assume that if he is to solve the problem. Hewson made the functional equivalence of different marbles clear by playing a 'swapping game' with the children.

The two modifications together produced a jump in success rates from 30 per cent to 90 per cent for five-year-olds and from 35 per cent to 72.5 per cent for four-year-olds. For three-year-olds, for reasons that are still in need of clarification, no improvement — rather a slight drop in performance - resulted from the change.

We may conclude, then, that children experience very real difficulty when faced with the Kendler apparatus; but this difficulty cannot be taken as proof that they are incapable of deductive reasoning.

Questions 28-35

Classify the following descriptions as a referring

Clark Hull CH
Howard and Tracy Kendler HTK
Micheal Cole and colleagues MC
Write the appropriate letters in boxes 28-35 on your answer sheet.

NB You may use any answer more than once.

28 is cited as famous in the field of psychology.

29 demonstrated that the two-stage experiment involving button-pressing and inserting a marble into a hole poses problems for certain adults as well as children.

30. . . . . . . .devised an experiment that investigated deductive reasoning without the use of any marbles.

31. . . . . . . appears to have proved that a change in the apparatus dramatically improves the performance of children of certain ages.

32. . . . . . . .used a machine to measure inductive reasoning that replaced button-pressing with drawer-opening.

33. . . . . . . .experimented with things that the subjects might have been expected to encounter in everyday life, rather than with a machine.

34. . . . . . . .compared the performance of five-year-olds with college students, using the same apparatus with both sets of subjects.

35. . . . . . . .is cited as having demonstrated that earlier experiments into children's ability to reason deductively may have led to the wrong conclusions.

Questions 36-40

Do the following statements agree with the information given in Reading Passage 3?
In boxes 36-40 on your answer sheet write

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

36   Howard and Tracey Kendler studied under Clark Hull.

37   The Kendlers trained their subjects separately in the two stages of their experiment, but not in how to integrate the two actions.

38   Michael Cole and his colleagues demonstrated that adult performance on inductive reasoning tasks depends on features of the apparatus and procedure.

39   All Hewson's experiments used marbles of the same size.

40   Hewson's modifications resulted in a higher success rate for children of all ages.

WRITING TASK 1

V   should spend about 20 minutes on this task.

The table below shows the consumer durables (telephone, refrigerator, etc.) owned in Britain from 1972 to 1983.

Write a report for a university lecturer describing the information shown below.

You should write at least 150 words.

Consumer durables	1972	1974	**1976**	1978	**1979**	1981	**1982**	1983
Percentage of households with:								
central heating	**3?**	43	48	52	**55**	**59**	60	64
television	**93**	95	96	96	**97**	**97**	**97**	98
video								18
vacuum cleaner	87	89	92	92	**93**	**94**	95	
refrigerator	73	81	88	91	**92**	**93**	93	94
washing machine	66	68	71	75	**74**	**78**	79	80
dishwasher				3	**3**	**4**	4	5
telephone	42	50	54	60	**67**	**75**	76	77

READING PASSAGE 1

IMPLEMENTING THE CYCLE OF SUCCESS: A CASE STUDY

Within Australia, Australian Hotels Inc (AHI) operates nine hotels and employs over 2000 permanent full-time staff, 300 permanent part-time employees and 100 casual staff. One of its latest ventures, the Sydney Airport hotel (SAH), opened in March 1995. The hotel is the closest to Sydney Airport and is designed to provide the best available accommodation, food and beverage and meeting facilities in Sydney's southern suburbs. Similar to many international hotel chains, however, AHI has experienced difficulties in Australia in providing long-term profits for hotel owners, as a result of the country's high labour-cost structure. In order to develop an economically viable hotel organisation model, AHI decided to implement some new policies and practices at SAH.

The first of the initiatives was an organisational structure with only three levels of management - compared to the traditional seven. Partly as a result of this change, there are 25 per cent fewer management positions, enabling a significant saving. This change also has other implications. Communication, both up and down the organisation, has greatly improved. Decision-making has been forced down in many cases to front-line employees. As a result, guest requests are usually met without reference to a supervisor, improving both customer and employee satisfaction.

The hotel also recognised that it would need a different approach to selecting employees who would fit in with its new policies. In its advertisements, the hotel stated a preference for people with some 'service' experience in order to minimise traditional work practices being introduced into the hotel. Over 7000 applicants filled in application forms for the 120 jobs initially offered at SAH. The balance of the positions at the hotel (30 management and 40 shift leader positions) were predominantly filled by transfers from other AHI properties.

A series of tests and interviews were conducted with potential employees, which eventually left 280 applicants competing for the 120 advertised positions. After the final interview, potential recruits were divided into three categories. Category A was for applicants exhibiting strong leadership qualities, Category C was for applicants perceived to be followers, and Category B was for applicants with both leader and follower qualities. Department heads and shift leaders then composed prospective teams using a combination of people from all three categories. Once suitable teams were formed, offers of employment were made to team members.

Another major initiative by SAH was to adopt a totally multi-skilled workforce. Although there may be some limitations with highly technical jobs such as cooking or maintenance, wherever possible, employees at SAH are able to work in a wide variety of positions. A multi-skilled workforce provides far greater management flexibility during peak and quiet times to transfer employees to needed positions. For example, when office staff are away on holidays during quiet periods of the year, employees in either food or beverage or housekeeping departments can temporarily

The most crucial way, however, of improving the labour cost structure at SAH was to find better, more productive ways of providing customer service. SAH management concluded this would first require a process of 'benchmarking'. The prime objective of the benchmarking process was to compare a range of service delivery processes across a range of criteria using teams made up of employees from different departments within the hotel which interacted with each other. This process resulted in performance measures that greatly enhanced SAH's ability to improve productivity and quality.

The front office team discovered through this project that a high proportion of AHI Club member reservations were incomplete. As a result, the service provided to these guests was below the standard promised to them as part of their membership agreement. Reducing the number of incomplete reservations greatly improved guest perceptions of service.

In addition, a program modelled on an earlier project called 'Take Charge' was implemented. Essentially, Take Charge provides an effective feedback loop from both customers and employees. Customer comments, both positive and negative, are recorded by staff. These are collated regularly to identify opportunities for improvement. Just as importantly, employees are requested to note down their own suggestions for improvement. (AHI has set an expectation that employees will submit at least three suggestions for every one they receive from a customer.) Employee feedback is reviewed daily and suggestions are implemented within 48 hours, if possible, or a valid reason is given for non-implementation. If suggestions require analysis or data collection, the Take Charge team has 30 days in which to address the issue and come up with recommendations.

Although quantitative evidence of AHI's initiatives at SAH are limited at present, anecdotal evidence clearly suggests that these practices are working. Indeed AHI is progressively rolling out these initiatives in other hotels in Australia, whilst numerous overseas visitors have come to see how the program works.

Choose the appropriate letters A-D and write them in boxes 1-5 on your answer sheet.

1   The high costs of running AHI's hotels are related to their ...

A   management.
B   size.
C   staff.
D   policies.

2   SAH's new organisational structure requires ...

A   75% of the old management positions.
B   25% of the old management positions.
C   25% more management positions.
D   5% fewer management positions.

3   The SAH's approach to organisational structure required changing practices in ..

A   industrial relations.
B   firing staff.
C   hiring staff.
D   marketing.

4   The total number of jobs advertised at the SAH was ...

A   70.
B   120.
C   170.
D   280.

5   Categories A, B and C were used to select...

A   front office staff.
B   new teams.
C   department heads.
D   new managers.

Questions 6-13
Complete the following summary of the last four paragraphs of Reading Passage 1 using ONE OR TWO words from the Reading Passage for each answer.
Write your answers in boxes 6-13 on your answer sheet.

WHAT THEY DID AT SAH

Teams of employees were selected from different hotel departments to participate in a ... (6) ... exercise.

The information collected was used to compare ... (7) ... processes which, in turn, led to the development of ... (8) ... that would be used to increase the hotel's capacity to improve ... (9) ... as well as quality. Also, an older program known as ... (10) ... was introduced at SAH. In this program,... (11) ... is sought from customers and staff. Wherever possible ... (12) ... suggestions are implemented within 48 hours. Other suggestions are investigated for their feasibility for a period of up to ...(13)....

READING PASSAGE 2

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

The discovery that language can be a barrier to communication is quickly made by all who travel, study, govern or sell. Whether the activity is tourism, research, government, policing, business, or data dissemination, the lack of a common language can severely impede progress or can halt it altogether. 'Common language' here usually means a foreign language, but the same point applies in principle to any encounter with unfamiliar dialects or styles within a single language. 'They don't talk the same language' has a major metaphorical meaning alongside its literal one.

Although communication problems of this kind must happen thousands of times each day, very few become public knowledge. Publicity comes only when a failure to communicate has major consequences, such as strikes, lost orders, legal problems, or fatal accidents - even, at times, war. One reported instance of communication failure took place in 1970, when several Americans ate a species of poisonous mushroom. No remedy was known, and two of the people died within days. A radio report of the case was heard by a chemist who knew of a treatment that had been successfully used in 1959 and published in 1963. Why had the American doctors not heard of it seven years later? Presumably because the report of the treatment had been published only in journals written in European languages other than English.

Several comparable cases have been reported. But isolated examples do not give an impression of the size of the problem — something that can come only from studies of the use or avoidance of foreign-language materials and contacts in different communicative situations. In the English-speaking scientific world, for example, surveys of books and documents consulted in libraries and other information agencies have shown that very little foreign-language material is ever consulted. Library requests in the field of science and technology showed that only 13 per cent were for foreign language periodicals. Studies of the sources cited in publications lead to a similar conclusion: the use of foreign-language sources is often found to be as low as 10 per cent.

The language barrier presents itself in stark form to firms who wish to market their products in other countries. British industry, in particular, has in recent decades often been criticised for its linguistic insularity — for its assumption that foreign buyers will be happy to communicate in English, and that awareness of other languages is not therefore a priority. In the 1960s, over two-thirds of British firms dealing with

• non-English-speaking customers were using English for outgoing correspondence; many had their sales literature only in English; and as many as 40 per cent employed no-one able to communicate in the customers' languages. A similar problem was identified in other English-speaking countries, notably the USA, Australia and New Zealand. And non-English-speaking countries were by no means exempt - although the widespread use of English as an alternative language made them less open to the charge of insularity.

The criticism and publicity given to this problem since the 1960s seems to have greatly improved the situation. industrial training schemes have promoted an increase in linguistic and cultural awareness. Many firms now have their own translation services; to take just one example in Britain, Rowntree Mackintosh now publish their documents in six languages (English, French, German, Dutch, Italian and Xhosa). Some firms run part-time language courses in the languages of the countries with which they are most involved; some produce their own technical glossaries, to ensure consistency when material is being translated. It is now much more readily appreciated that marketing efforts can be delayed, damaged, or disrupted by a failure to take account of the linguistic needs of the customer.

The changes in awareness have been most marked in English-speaking countries, where the realisation has gradually dawned that by no means everyone in the world knows English well enough to negotiate in it. This is especially a problem when English is not an official language of public administration, as in most parts of the Far East, Russia, Eastern Europe, the Arab world, Latin America and French-speaking Africa. Even in cases where foreign customers can speak English quite well, it is often forgotten that they may not be able to understand it to the required level - bearing in mind the regional and social variation which permeates speech and which can cause major problems of listening comprehension. In securing understanding, how 'we' speak to 'them' is just as important, it appears, as how 'they' speak to 'us'.

Questions 14-17

Complete each of the following statements (Questions 14-17) with words taken from Reading Passage 2.
Write NO MORE THAN THREE WORDS for each answer.
Write your answers in boxes 14-17 on your answer sheet.

14   Language problems may come to the attention of the public when they have
...., such as fatal accidents or social problems.

15   Evidence of the extent of the language barrier has been gained from
....of materials used by scientists such as books and periodicals.

16   An example of British linguistic insularity is the use of English for materials such as

17   An example of a part of the world where people may have difficulty in negotiating English is...

Questions 18-20

Choose the appropriate letters A-D and write them in boxes 18-20 on your answer sheet.

18   According to the passage, 'They don't talk the same language' (paragraph 1), can refer to problems in ...

A .   understanding metaphor.
B   learning foreign languages.
C   understanding dialect or style.
D   dealing with technological change.

19   The case of the poisonous mushrooms (paragraph 2) suggests that American doctors .

A   should pay more attention to radio reports.
B   only read medical articles if they are in English.
C   are sometimes unwilling to try foreign treatments.
D   do not always communicate effectively with their patients.

20   According to the writer, the linguistic insularity of British businesses ...

A   later spread to other countries.
B   had a negative effect on their business.
C   is not as bad now as it used to be in the past.
D   made non-English-speaking companies turn to other markets.

Questions 21-24
LIST the four main ways in which British companies have tried to solve the problem of the language barrier since the 1960s.
WRITE NO MORE THAN THREE WORDS for each answer.
Write your answers in boxes 21-24 on your answer sheet.
21 ....
22 ——————————

24 ....

Questions 25 and 26

Choose the appropriate letters A-D and write them in boxes 25 and 26 on your answer sheet.

25   According to the writer, English-speaking people need to be aware that...

A   some foreigners have never met an English-speaking person.
B   many foreigners have no desire to learn English.
C   foreign languages may pose a greater problem in the future.
D   English-speaking foreigners may have difficulty understanding English.

26   A suitable title for this passage would be ...

A   Overcoming the language barrier
B   How to survive an English-speaking world
C   Global understanding - the key to personal progress
D   The need for a common language

READING PASSAGE 3

*You should spend about 20 minutes on **Questions 27-40** which are based on Reading Passage 3 on the following pages.*

Questions 27-30

Reading Passage 3 has seven paragraphs A-G.
From the list of headings below choose the most suitable headings for paragraphs B-E.
*Write the appropriate numbers (**i-viii**) in boxes 27-30 on your answer sheet.*

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

List of Headings

i   **A truly international environment**

ii   **Once a port city, always a port city**

iii   **Good ports make huge profits**

iv   **How the port changes a city's**
      infrastructure

v   **Reasons   for the decline of ports**

vi   **Relative significance of trade and service**
      industry

vii   **Ports and harbours**

viii **The demands of the oil industry**

Example	*Answer*
Paragraph A	**vii**

27   Paragraph B

28   Paragraph C

29   Paragraph D

30   Paragraph E

What Is a Port City?

The port city provides a fascinating and rich understanding of the movement of people and qoods around the world. We understand a port as a centre of land-sea exchange, and as a major source of livelihood and a major force for cultural mixing. But do ports all produce a range of common urban characteristics which justify classifying port cities toqether under a single generic label? Do they have enough in common to warrant distinguishing them from other kinds of cities ?

A A port must be distinguished from a harbour. They are two very different things. Most ports have poor harbours, and many fine harbours see few ships. Harbour is a physical concept, a shelter for ships; port is an economic concept, a centre of land-sea exchange which requires good access to a hinterland even more than a sea-linked foreland. It is landward access, which is productive of goods for export and which demands imports, that is critical. Poor harbours can be improved with breakwaters and dredging if there is a demand for a port. Madras and Colombo are examples of harbours expensively improved by enlarging, dredging and building breakwaters.

B Port cities become industrial, financial and service centres and political capitals because of their water connections and the urban concentration which arises there and later draws to it railways, highways and air routes. Water transport means cheap access, the chief basis of all port cities. Many of the world's biggest cities, for example, London, New York, Shanghai, Istanbul, Buenos Aires, Tokyo, Jakarta, Calcutta, Philadelphia and San Francisco began as ports - that is, with land-sea exchange as their major function - but they have since grown disproportionately in other respects so that their port functions are no longer dominant. They remain different kinds of places from non-port cities and their port functions account for that difference.

C   Port functions, more than anything else, make a city cosmopolitan. A port city is open to the world. In it races, cultures, and ideas, as well as goods from a variety of places, jostle, mix and enrich each other and the life of the city. The smell of the sea and the harbour, the sound of boat whistles or the moving tides are symbols of their multiple links with a wide world, samples of which are present in microcosm within their own urban areas.

D   Sea ports have been transformed by the advent of powered vessels, whose size and draught have increased. Many formerly important ports have become economically and physically less accessible as a result. By-passed by most of their former enriching flow of exchange, they have become cultural and economic backwaters or have acquired the character of museums of the past. Examples of these are Charleston, Salem, Bristol, Plymouth, Surat, Galle, Melaka, Soochow, and a long list of earlier prominent port cities in Southeast Asia, Africa and Latin America.

E   Much domestic port trade has not been recorded. What evidence we have sug3ests that domestic trade was greater at all periods than external trade. Shanghai, for example, did most of its trade with other Chinese ports and inland cities. Calcutta traded mainly with other parts of India and so on. Most of any city's population is engaged in providing goods and services for the city itself. Trade outside the city is its basic function. But each basic worker requires food, housing, clothing and other such services. Estimates of the ratio of basic to service workers range from 1:4 to 1:8.

F   No city can be simply a port but must be involved in a variety of other activities. The port function of the city draws to it raw materials and distributes them in many other forms. Ports take advantage of the need for breaking up the bulk material where water and land transport meet and where loading and unloading costs can be minimised by refining raw materials or turning them into finished goods. The major examples here are oil refining and ore refining, which are commonly located at ports. It is not easy to draw a line around what is and is not a port function. All ports handle, unload, sort, alter, process, repack, and reship most of what they receive. A city may still be regarded as a port city when it becomes involved in a great range of functions not immediately involved with ships or docks.

G   Cities which began as ports retain the chief commercial and administrative centre of the city close to the waterfront. The centre of New York is in lower Manhattan between two river mouths, the City of London is on the Thames, Shanghai along the Bund. This proximity to water is also true of Boston, Philadelphia, Bombay, Calcutta, Madras, Singapore, Bangkok, Hong Kong and Yokohama, where the commercial, financial, and administrative centres are still grouped around their harbours even though each city has expanded into a metropolis. Even a casual visitor cannot mistake them as anything but port cities.

Look at the following descriptions (Questions 31-34) of some port cities mentioned in Reading

Match the pairs of cities (A-H) listed below; with the descriptions.
Match the appropriate letters A-H in boxes 31-34 on your answer sheet.

NB There are more pairs of port cities than descriptions, so you will not use them all.

31 required considerable harbour development

32 began as ports but other facilities later dominated

33 lost their prominence when large ships could not be accommodated

34   maintain their business centres near the port waterfront

A   Bombay and Buenos Aires
B   Hong Kong and Salem
C   Istanbul and Jakarta
D   Madras and Colombo
E   New York and Bristol
F   Plymouth and Melaka
G   Singapore and Yokohama
H   Surat and London

Questions35-40

Do the fallowing statements agree with the information given in Reading Passage 3?
In boxes 35-40 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 in the passage

35   **Cities** cease **to be port cities when other** functions **dominate.**

36   **In the past, many port cities did more trade within their own country than with overseas ports.**

37   **Most people in a port city are engaged in international trade and finance.**

38   **Ports attract many subsidiary and independent industries.**

39   **Ports have to establish a common language of trade.**

**40**   **Ports often have river connections.**

WRITING TASK 1

You should spend about 20 minutes on this task.

> *The chart below shows the amount of leisure time enjoyed by men and women of different employment status.*
>
> *Write a report for a university lecturer describing the information shown below.*

You should write at least 150 words.

Leisure time in a typical week: by sex and employment status, 1998 – 99
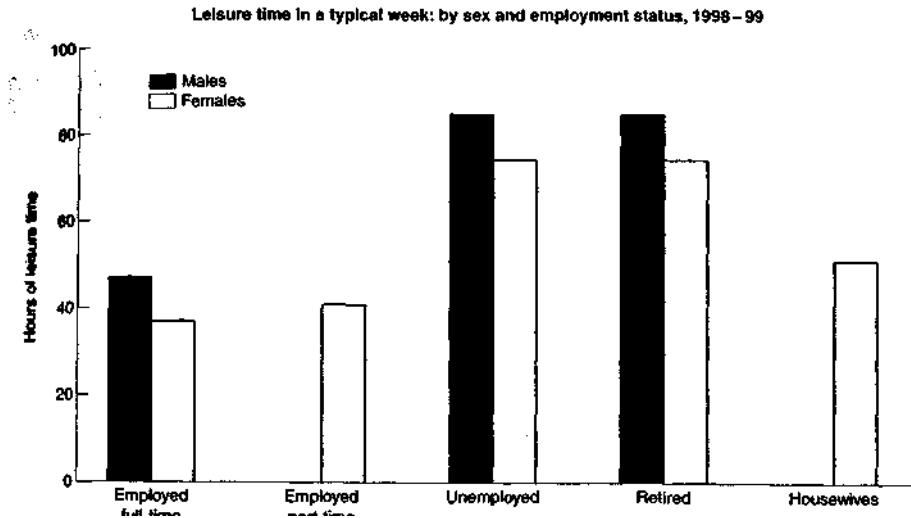
READING PASSAGE 1

ABSENTEEISM IN NURSING: A LONGITUDINAL STUDY

Absence from work is a costly and disruptive problem for any organisation. The cost of absenteeism in Australia has been put at 1.8 million hours per day or $1400 million annually. The study reported here was conducted in the Prince William Hospital in Brisbane, Australia, where, prior to this time, few active steps had been taken to measure, understand or manage the occurrence of absenteeism.

Nursing Absenteeism

A prevalent attitude amongst many nurses in the group selected for study was that there was no reward or recognition for not utilising the paid sick leave entitlement allowed them in their employment conditions. Therefore, they believed they may as well take the days off — sick or otherwise. Similar attitudes have been noted by James (1989), who noted that sick leave is seen by many workers as a right, like annual holiday leave.

Miller and Norton (1986), in their survey of 865 nursing personnel, found that 73 per cent felt they should be rewarded for not taking sick leave, because some employees always used their sick leave. Further, 67 per cent of nurses felt that administration was not sympathetic to the problems shift work causes to employees' personal and social lives. Only 53 per cent of the respondents felt that every effort was made to schedule staff fairly.

In another longitudinal study of nurses working in two Canadian hospitals, Hacket Bycio and Guion (1989) examined the reasons why nurses took absence from work. The most frequent reason stated for absence was minor illness to self. Other causes, in decreasing order of frequency, were illness in family, family social function, work to do at home and bereavement.

Method

In an attempt to reduce the level of absenteeism amongst the 250 Registered an Enrolled Nurses in the present study, the Prince William management introduced three different, yet potentially complementary, strategies over 18 months.

Strategy 1: Non-financial (material) incentives

Within the established wage and salary system it was not possible to use hospital funds to support this strategy. However, it was possible to secure incentives from loca businesses, including free passes to entertainment parks, theatres, restaurants, etc. At the end of each roster period, the ward with the lowest absence rate would win the prize.

Strategy 2 Flexible fair rostering

Where possible, staff were given the opportunity to determine their working schedule within the limits of clinical needs.

Strategy 3: Individual absenteeism and

Each month, managers would analyse the pattern of absence of staff with excessive sick leave (greater than ten days per year for full-timeemployees). Characteristic patterns of potential 'voluntary absenteeism' such as absence before and after days off, excessive weekend and night duty absence and multiple single days off were communicated to all ward nurses and then, as necessary, followed up by action.

Results

Absence rates for the six months prior to the Incentive scheme ranged from 3.69 per cent to 4.32 per cent. In the following six months they ranged between 2.87 per cent and 3.96 per cent. This represents a 20 per cent improvement. However, analysing the absence rates on a year-to-year basis, the overall absence rate was 3.60 per cent in the first year and 3.43 per cent in the following year. This represents a 5 per cent decrease from the first to the second year of the study. A significant decrease in absence over the two-year period could not be demonstrated.

Discussion

The non-financial incentive scheme did appear to assist in controlling absenteeism in the short term. As the scheme progressed it became harder to secure prizes and this contributed to the program's losing momentum and finally ceasing. There were mixed results across wards as well. For example, in wards with staff members who had long-term genuine illness, there was little chance of winning, and to some extent the staff on those wards were disempowered. Our experience would suggest that the long-term effects of incentive awards on absenteeism are questionable.

Over the time of the study, staff were given a larger degree of control in their rosters. This led to significant improvements in communication between managers and staff. A similar effect was found from the implementation of the third strategy. Many of the nurses had not realised the impact their behaviour was having on the organisation and their colleagues but there were also staff members who felt that talking to them about their absenteeism was 'picking' on them and this usually had a negative effect on management—employee relationships.

Conclusion

Although there has been some decrease in absence rates, no single strategy or combination of strategies has had a significant impact on absenteeism per se. Notwithstanding the disappointing results, it is our contention that the strategies were not in vain. A shared ownership of absenteeism and a collaborative approach to problem solving has facilitated improved cooperation and communication between management and staff. It is our belief that this improvement alone, while not tangibly measurable, has increased the ability of management to manage the effects of absenteeism more effectively since this study.

Do the following statements agree with the information given in Reading Passage 1?
In boxes 1-7 on your answer sheet write

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

1   The Prince William Hospital has been trying to reduce absenteeism amongst nurses for many years.

2   Nurses in the Prince William Hospital study believed that there were benefits in taking as little sick leave as possible.

3   Just over half the nurses in the 1986 study believed that management understood the effects that shift work had on them.

4   The Canadian study found that 'illness in the family' was a greater cause of absenteeism than 'work to do at home'.

5   In relation to management attitude to absenteeism the study at the Prince William Hospital found similar results to the two 1989 studies.

6   The study at the Prince William Hospital aimed to find out the causes of absenteeism amongst 250 nurses.

7   The study at the Prince William Hospital involved changes in management practices.

Complete the notes below.
*Choose **ONE OR TWO WORDS** from the passage, for each answer.*
Write your answers in boxes 8-13 on your answer sheet.

In the first strategy, wards with the lowest absenteeism in different periods would win prizes donated by ... (8) ....

In the second strategy, staff were given more control over their ...(9)....

In the third strategy, nurses who appeared to be taking ... (10)... sick leave or ... (11) ... were identified and counselled.

Initially, there was a ... (12)... per cent decrease in absenteeism.

The first strategy was considered ineffective and stopped. The second and third strategies generally resulted in better ... (13) ... among staff.

READING PASSAGE 2

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

THE MOTOR CAR

A There are now over 700 million motor vehicles in the world - and the number is rising by more than 40 million each year. The average distance driven by car users is growing too - from 8 km a day per person in western Europe in 1965 to 25 km a day in 1995. This dependence on motor vehicles has given rise to major problems, including environmental pollution, depletion of oil resources, traffic congestion and safety.

B While emissions from new cars are far less harmful than they used to be, city streets and motorways are becoming more crowded than ever, often with older trucks, buses and taxis, which emit excessive levels of smoke and fumes. This concentration of vehicles makes air quality in urban areas unpleasant and sometimes dangerous to breathe. Even Moscow has joined the list of capitals afflicted by congestion and traffic fumes. In Mexico City, vehicle pollution is a major health hazard.

C Until a hundred years ago, most journeys were in the 20 km range, the distance conveniently accessible by horse. Heavy freight could only be carried by water or rail. The invention of the motor vehicle brought personal mobility to the masses and made rapid freight delivery possible over a much wider area. Today about 90 per cent of inland freight in the United Kingdom is carried by road. Clearly the world cannot revert to the horse-drawn wagon. Can it avoid being locked into congested and polluting ways of transporting people and goods?

D In Europe most cities are still designed for the old modes of transport. Adaptation to the motor car has involved adding ring roads, one-way systems and parking lots. In the United States, more land is assigned to car use than to housing. Urban sprawl means that life without a car is next to impossible. Mass use of motor vehicles has also killed or injured millions of people. Other social effects have been blamed on the car such as alienation and aggressive human behaviour.

E A 1993 study by the European Federation for Transport and Environment found that car transport is seven times as costly as rail travel in terms of the external social costs it entails such as congestion, accidents, pollution, loss of cropland and natural habitats, depletion of oil resources, and so on. Yet cars easily surpass trains or buses as a flexible and convenient mode of personal transport. It is unrealistic to expect people to give up private cars in favour of mass transit.

F Technical solutions can reduce the pollution problem and increase the fuel efficiency of engines. But fuel consumption and exhaust emissions depend on which cars are preferred by customers and how they are driven. Many people buy larger cars than they need for daily purposes or waste fuel by driving aggressively. Besides, global car use is increasing at a faster rate than the improvement in emissions and fuel efficiency which technology is now making possible.

G One solution that has been put forward is the long-term solution of designing cities and neighbourhoods so that car journeys are not necessary - all essential services being located within walking distance or easily accessible by public transport. Not only would this save energy and cut carbon dioxide emissions, it would also enhance the quality of community life, putting the emphasis on people instead of cars. Good local government is already bringing this about in some places. But few democratic communities are blessed with the vision - and the capital - to make such profound changes in modern lifestyles.

H A more likely scenario seems to be a combination of mass transit systems for travel into and around cities, with small 'low emission' cars for urban use and larger hybrid or lean burn cars for use elsewhere. Electronically tolled highways might be used to ensure that drivers pay charges geared to actual road use. Better integration of transport systems is also highly desirable - and made more feasible by modern computers. But these are solutions for countries which can afford them. In most developing countries, old cars and old technologies continue to predominate.

Questions 14-19

Reading Passage 2 has eight paragraphs (A-H). Which paragraphs concentrate on the following information? Write the appropriate letters (A-H) in boxes 14-19 on your answer sheet.

NB You need only write ONE letter for each answer.

14   a comparison of past and present transportation methods

15   how driving habits contribute to road problems

16   the relative merits of cars and public transport

17   the writer's own prediction of future solutions

18   the increasing use of motor vehicles

19   the impact of the car on city development

Do the following statements agree with the information given in Reading Passage 2?
In boxes 20-26 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 in the passage*

20   Vehicle pollution is worse in European cities than anywhere else.

21   Transport by horse would be a useful alternative to motor vehicles.

22   Nowadays freight is not carried by water in the United Kingdom.

23   Most European cities were not designed for motor vehicles.

24   Technology alone cannot solve the problem of vehicle pollution.

25   People's choice of car and attitude to driving is a factor in the pollution problem.

26   Redesigning cities would be a short-term solution.

READING PASSAGE 3

*You should spend about 20 minutes on **Questions 27-40** which are based on Reading Passage 3 on the following pages.*

Questions 27-33

Reading Passage 3 has eight paragraphs (A-H).
Choose the most suitable headings for paragraphs B-H from the list of headings below.
Write the appropriate numbers (i-x) in boxes 27-33 on your answer sheet.

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

List of Headings

i   Common objections
ii   Who's planning what
iii   This type sells best in the shops
iv   The figures say it all
v   Early trials
vi-   They can't get in without these
vii   How does it work?
viii Fighting fraud
ix   Systems to avoid
x   Accepting the inevitable

27   Paragraph B

28   Paragraph C

29   Paragraph D

30   Paragraph E

31   Paragraph F

32   Paragraph G

33   Paragraph H

A   Students who want to enter the University of Montreal's Athletic Complex need more than just a conventional ID card - their identities must be authenticated by an electronic hand scanner. In some California housing estates, a key alone is insufficient to get someone in the door; his or her voiceprint must also be verified. And soon, customers at some Japanese banks will have to present their faces for scanning before they can enter the building and withdraw their money.

B   All of these are applications of biometrics, a little-known but fast-growing technology that involves the use of physical or biological characteristics to identify individuals. In use for more than a decade at some high-security government institutions in the United States and Canada, biometrics are now rapidly popping up in the everyday world. Already, more than 10,000 facilities, from prisons to day-care centres, monitor people's fingerprints or other physical parts to ensure that they are who they claim to be. Some 60 biometric companies around the world pulled in at least $22 million last year and that grand total is expected to mushroom to at least $50 million by 1999.

C   Biometric security systems operate by storing a digitised record of some unique human feature. When an authorised user wishes to enter or use the facility, the system scans the person's corresponding characteristics and attempts to match them against those on record. Systems using fingerprints, hands, voices, irises, retinas and faces are already on the market. Others using typing patterns and even body odours are in various stages of development.

D   Fingerprint scanners are currently the most widely deployed type of biometric application, thanks to their growing use over the last 20 years by law-enforcement agencies. Sixteen American states now use biometric fingerprint verification systems to check that people claiming welfare payments are genuine. In June, politicians in Toronto voted to do the same, with a pilot project beginning next year.

E   To date, the most widely used commercial biometric system is the handkey, a type of hand scanner which reads the unique shape, size and irregularities of people's hands. Originally developed for nuclear power

)

plants, the handkey received its big break when it was used to control access to the Olympic Village in Atlanta by more than 65,000 athletes, trainers and support staff. Now there are scores of other applications.

F   Around the world, the market is growing rapidly. Malaysia, for example, is preparing to equip all of its airports with biometric face scanners to match passengers with luggage. And Japan's largest maker of cash dispensers is developing new machines that incorporate iris scanners. The first commercial biometric, a hand reader used by an American firm to monitor employee attendance, was introduced in 1974. But only in the past few years has the technology improved enough for the prices to drop sufficiently to make them commercially viable. 'When we started four years ago, I had to explain to everyone what a biometric is,' says one marketing expert. 'Now, there's much more awareness out there.'

C   Not surprisingly, biometrics raise thorny questions about privacy and the potential for abuse. Some worry that governments and industry will be tempted to use the technology to monitor individual behaviour. 'If someone used your fingerprints to match your health-insurance records with a credit-card record showing you regularly bought lots of cigarettes and fatty foods,' says one policy analyst, 'you would see your insurance payments go through the roof.' In Toronto, critics of the welfare fingerprint plan complained that it would stigmatise recipients by forcing them to submit to a procedure widely identified with criminals.

H   Nonetheless, support for biometrics is growing in Toronto as it is in many other communities. In an increasingly crowded and complicated world, biometrics may well be a technology whose time has come.

Questions 34-40

*Look at the fallowing groups of people (**Questions 34-40**) and the list of biometric systems (A-F) below.*
Match the groups of people to the biometric system associated with them in Reading Passage 3.
Write the appropriate letters A-F in boxes 34-40 on your answer sheet.

NB   You may use any biometric system more than once.

34   sports students

35   Olympic athletes

36   airline passengers

37   welfare claimants

38   business employees

39   home owners

40   bank customers

List of Biometric Systems

A   fingerprint scanner
B   hand scanner
C   body odour
D   voiceprint
E   face scanner
F   typing pattern

WRITING TASK 1

You should spend about 20 minutes on this task.

> *The first chart below shows the results of a survey which sampled a cross-section of 100,000 people asking if they travelled abroad and why they travelled for the period 1994-98. The second chart shows their destinations over the same period.*
>
> *Write a report for a university lecturer describing the information shown below.*

You should write at least 150 words.

VISITS ABROAD BY UK RESIDENTS BY PURPOSE OF VISIT (1994-98)					
	1994	**1995**	**1996**	**1997**	**1998**
Holiday	**15,246**	**14,898**	**17,896**	**19,703**	**20,700**
Business	3,155	3,188	3,249	3,639	**3,957**
Visits to friends and relatives	2,689	2,628	2,774	3,051	3,181
Other reasons	982	896	1,030	1,054	990
TOTAL	22,072	21,610	24,949	27,447	28.828

DESTINATIONS OF VISITS ABROAD BY UK RESIDENTS BY MAIN REGION (1994-98)				
	Western Europe	**North America**	**• Other areas**	**Total**
1994	**19,371**	**919**	**1,782**	**22,072**
1995	18,944	914	**1,752**	**21,610**
1996	**21,877**	**1,167**	**1,905**	**24,949**
1997	**23,661**	**1,559**	**2,227**	**27,447**
1998	**24,519**	**1,823**	**2,486**	**28,828**

Which group gave the following advice?

Tick Column A   *if it was mainly women.*
Tick Column B   *if it was mainly men.*
Tick Column C   *if it was both men and women.*

	A	B	C
Example Don't stop to ask directions. .	V		
(36) Avoid eye contact with other drivers.			
(37) Inform someone of your likely arrival time.			
(38) Ensure car keys are ready when you return to the car.			
(39) Leave plenty of space when parking.			
(40) Keep all doors locked.			

READING PASSAGE 1

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

Green Wave Washes Over Mainstream Shopping

Research in Britain has shown that green consumers' continue to flourish as a significant group amongst shoppers. This suggests that politicians who claim environmentalism is yesterday's issue may be seriously misjudging the public mood.

A report from Mintel, the market research organisation, says that despite recession and financial pressures, more people than ever want to buy environmentally friendly products and a 'green wave' has swept through consumerism, taking in people previously untouched by environmental concerns. The recently published report also predicts that the process will repeat itself with 'ethical' concerns, involving issues such as fair trade with the Third World and the social record of businesses. Companies will have to be more honest and open in response to this mood.

Mintel's survey, based on nearly 1,000 consumers, found that the proportion who look for green products and are prepared to pay more for them has climbed from 53 per cent in 1990 to around 60 per cent in 1994. On average, they will pay 13 per cent more for such products, although this percentage is higher among women, managerial and professional groups and those aged 35 to 44.

Between 1990 and 1994 the proportion of consumers claiming to be unaware of or unconcerned about green issues fell from 18 to 10 per cent but the number of green spenders among older people and manual workers has risen substantially. Regions such as Scotland have also caught up with the south of England in their environmental concerns. According to Mintel, the image of green consumerism as associated in the past with the more eccentric members of society has virtually disappeared. The consumer research manager for Mintel, Angela Hughes, said it had become firmly established as a mainstream market. She explained that as far as the average person is concerned environmentalism has not gone off the boil'. In fact, it has spread across a much wider range of consumer groups, ages and occupations.

Mintel's 1994 survey found that 13 per cent of consumers are 'very dark green', nearly always buying environmentally friendly products, 28 per cent are 'dark green', trying 'as far as possible' to buy such products, and 21 per cent are 'pale green' - tending to buy green products if they see them. Another 26 per cent are

'armchair greens'; they said they care about environmental issues but their concern does not affect their spending habits. Only 10 per cent say they do not care about green issues.

Four in ten people are 'ethical spenders', buying goods which do not, for example, involve dealings with oppressive regimes. This figure is the same as in 1990, although the number of 'armchair ethicals' has risen from 28 to 35 per cent and only 22 per cent say they are unconcerned now, against 30 per cent in 1990. Hughes claims that in the twenty-first century, consumers will be encouraged to think more about the entire history of the products and services they buy, including the policies of the companies that provide them and that this will require a greater degree of honesty with consumers,

Among green consumers, animal testing is the top issue - 48 per cent said they would be deterred from buying a product it if had been tested on animals - followed by concerns regarding irresponsible selling, the ozone layer, river and sea pollution, forest destruction, recycling and factory farming. However, concern for specific issues is lower than in 1990, suggesting that many consumers feel that Government and business have taken on the environmental agenda.

Questions 1-6

Do the following statements agree with the claims of the writer of Reading Passage 1?
In boxes 1-6 on your answer sheet write

> *YES*   *if the statement agrees with the claims of the writer*
> *NO*   *if the statement contradicts the claims of the writer*
> *NOT GIVEN if it is impossible to say what the writer thinks about this*

1   The research findings report commercial rather than political trends.

2   Being financially better off has made shoppers more sensitive to buying 'green'.

3   The majority of shoppers are prepared to pay more for the benefit of the environment according to the research findings.

4   Consumers' green shopping habits are influenced by Mintel's findings.

5   Mintel have limited their investigation to professional and managerial groups.

6   Mintel undertakes market surveys on an annual basis.

Questions 7-9

Choose the appropriate letters A-D and write them in boxes 7-9 on your answer sheet.

7   Politicians may have 'misjudged the public mood' because ...

    A   they are pre-occupied with the recession and financial problems.
    B   there is more widespread interest in the environment agenda than they anticipated.
    C   consumer spending has increased significantly as a result of 'green' pressure.
    D   shoppers are displeased with government policies on a range of issues.

8   What is Mintel?

    A   an environmentalist group
    B   a business survey organisation
    C   an academic research team
    D   a political organisation

9   A consumer expressing concern for environmental issues without actively supporting such principles is…

    A   an 'ethical spender'.
    B   a 'very dark green' spender.
    C   an 'armchair green'.
    D   a 'pale green' spender.

Complete the summary using words from the box below.
Write your answers in boxes 10-13 on your answer sheet.

NB There are more answers than spaces, so you will not use them all.

The Mintel report suggests that in future companies will be forced to practise greater ... (10) ... in their dealings because of the increased awareness amongst... (11)... of ethical issues. This prediction is supported by the growth in the number of ... (12)... identified in the most recent survey published. As a consequence, it is felt that companies will have to think more carefully about their ... (13)....

environmental research	armchair ethicals
honesty and openness	environmentalists
ethical spenders	consumers
politicians	political beliefs
social awareness	financial constraints
social record	

READING PASSAGE 2

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

A There is a great concern in Europe and North America about declining standards of literacy in schools. In Britain, the fact that 30 per cent of 16 year olds have a reading age of 14 or less has helped to prompt massive educational changes. The development of literacy has far-reaching effects on general intellectual development and thus anything which impedes the development of literacy is a serious matter for us all. So the hunt is on for the cause of the decline in literacy. The search so far has focused on socio-economic factors, or the effectiveness of 'traditional' versus 'modern' teaching techniques.

B The fruitless search for the cause of the increase in illiteracy is a tragic example of the saying 'They can't see the wood for the trees'. When teachers use picture books, they are simply continuing a long-established tradition that is accepted without question. And for the past two decades, illustrations in reading primers have become increasingly detailed and obtrusive, while language has become impoverished — sometimes to the point of extinction.

C Amazingly, there is virtually no empirical evidence to support the use of illustrations in teaching reading. On the contrary, a great deal of empirical evidence shows that pictures interfere in a damaging way with all aspects of learning to read. Despite this, from North America to the Antipodes, the first books that many school children receive are totally without text.

D A teacher's main concern is to help young beginner readers to develop not only the ability to recognise words, but the skills necessary to understand what these words mean. Even if a child is able to read aloud fluently, he or she may not be able to understand much of it: this is called 'barking at text'. The teacher's task of improving comprehension is made harder by influences outside the classroom. But the adverse effects of such things as television, video games, or limited language experiences at home, can be offset by experiencing 'rich' language at school.

E Instead, it is not unusual for a book of 30 or more pages to have only one sentence full of repetitive phrases. The artwork is often marvellous, but the pictures make the language redundant, and the children have no need to imagine anything when they read such books. Looking at a picture actively prevents children younger than nine from creating a mental image, and can make it difficult for older children. In order to learn how to comprehend, they need to practise making their own meaning in response to text. They need to have their innate powers of imagination trained.

F   As they grow older, many children turn aside from books without pictures, and it is a situation made more serious as our culture becomes more visual. It is hard to wean children off picture books when pictures have played a major part throughout their formative reading experiences, and when there is competition for their attention from so many other sources of entertainment. The least intelligent are most vulnerable, but tests show that even intelligent children are being affected. The response of educators has been to extend the use of pictures in books and to simplify the language, even at senior levels. The Universities of Oxford and Cambridge recently held joint conferences to discuss the noticeably rapid decline in literacy among their undergraduates.

G   Pictures are also used to help motivate children to read because they are beautiful and eye-catching. But motivation to read should be provided by listening to stories well read, where children imagine in response to the story. Then, as they start to read, they have this experience to help them understand the language. If we present pictures to save children the trouble of developing these creative skills, then I think we are making a great mistake.

H   Academic journals ranging from educational research, psychology, language learning, psycholinguistics, and so on cite experiments which demonstrate how detrimental pictures are for beginner readers. Here is a brief selection:

I   The research results of the Canadian educationalist Dale Willows were clear and consistent: pictures affected speed and accuracy and the closer the pictures were to the words, the slower and more inaccurate the child's reading became. She claims that when children come to a word they already know, then the pictures are unnecessary and distracting. If they do not know a word and look to the picture for a clue to its meaning, they may well be misled by aspects of the pictures which are not closely related to the meaning of the word they are trying to understand.

J   Jay Samuels, an American psychologist, found that poor readers given no pictures learnt significantly more words than those learning to read with books with pictures. He examined the work of other researchers who had reported problems with the use of pictures and who found that a word without a picture was superior to a word plus a picture.When children were given words and pictures, those who seemed to ignore the pictures and pointed at the words learnt more words than the children who pointed at the pictures, but they still learnt fewer words than the children who had no illustrated stimuli at all.

Choose the appropriate letters A-D and write them in boxes 1i

14   Readers are said to 'bark' at a text when ...

A   they read too loudly.
B   there are too many repetitive words.
C   they are discouraged from using their imagination.
D   they have difficulty assessing its meaning.

15   The text suggests that...

A   pictures in books should be less detailed.
B.   pictures can slow down reading progress.
C   picture books are best used with younger readers.
D   pictures make modern books too expensive.

16   University academics are concerned because ...

A   young people are showing less interest in higher ed
B   students cannot understand modern academic text
C   academic books are too childish for their undergra
D   there has been a significant change in student litera

17   The youngest readers will quickly develop good reading

A   learn to associate the words in a text with pictures.
B   are exposed to modern teaching techniques.
C   are encouraged to ignore pictures in the text.
D   learn the art of telling stories.

Questions 18-21

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

18   It is traditionally accepted that children's books should contain few pictures.

19   Teachers aim to teach both word recognition and word meaning.

20   Older readers are having difficulty in adjusting to texts without pictures.

21   Literacy has improved as a result of recent academic conferences.

Questions 22-25

Reading Passage 2 has ten paragraphs, A-J. Which paragraphs state the following information?
Write the appropriate letters A-J in boxes 22-25 on your answer sheet.

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

22   The decline of literacy is seen in groups of differing ages and abilities.

23   Reading methods currently in use go against research findings.

24   Readers able to ignore pictures are claimed to make greater progress.

25   Illustrations in books can give misleading information about word meaning.

Question 26

From the list below choose the most suitable title for the whole of Reading Passage 2.
Write the appropriate letter A-E in box 26 on your answer sheet.

A   The global decline in reading levels
B   Concern about recent educational developments
C   The harm that picture books can cause
D   Research carried out on children's literature
E   An examination of modern reading styles

READING PASSAGE 3

You should spend about 26 minutes on **Questions 27-40** which are based on Reading Passage 3 below.

v

It has been called the Holy Grail of modern biology. Costing more than £2 billion, it is the most ambitious •scientific project since the Apollo programme that landed a man on the moon. And it will take longer to accomplish than the lunar missions, for it will not be complete until early next century. Even before it is finished, according to those involved, this project should open up new understanding of, and new treatments for, many of the ailments that afflict humanity. As a result of the Human Genome Project, there will be new hope of liberation from the shadows of cancer, heart disease, auto-immune diseases such as rheumatoid arthritis, and some psychiatric illnesses.

The objective of the Human Genome Project is simple to state, but audacious in scope: to map and analyse every single gene within the double helix of humanity's DNA[1]. The project will reveal a new human anatomy — not the bones, muscles and sinews, but the complete genetic blueprint for a human being. Those working on the Human Genome Project claim that the new genetical anatomy will transform medicine and reduce human suffering in the twenty-first century. But others see the future through a darker glass, and fear that the project may open the door to a world peopled by Frankenstein's monsters and disfigured by a new eugenics[2].

The genetic inheritance a baby receives from its parents at the moment of conception fixes much of its later development, determining characteristics as varied as whether it will have blue eyes or suffer from a life-threatening illness such as cystic fibrosis. The human genome is the compendium of all these inherited genetic instructions. Written out along the double helix of DNA are the chemical letters of the genetic text. It is an extremely long text, for the human genome contains more than 3 billion letters: On the printed page it would fill about 7,000 volumes. Yet, within little more than a decade, the position of every letter and its relation to its neighbours will have been tracked down, analysed and recorded.

Considering how many letters there are in the human genome, nature is an excellent proof-reader. But sometimes there are mistakes. An error in a single 'word' — a gene - can give rise to the crippling condition of cystic fibrosis, the commonest genetic disorder among Caucasians. Errors in the genetic recipe for haemoglobin, the protein that gives blood its characteristic red colour and which carries oxygen from the lungs to the rest of the body, give rise to the most common single-gene disorder in the world: thalassaemia. More than 4,000 such single-gene defects are known to afflict humanity. The majority of them are fatal; the majority of the victims are children.

None of the single-gene disorders is a disease in the conventional sense, for which it would be possible to

administer a curative drug: the defect is pre-programmed into every cell of the sufferer's body. But there is hope of progress. In 1986,. American researchers identified the genetic defect underlying one type of muscular dystrophy. In 1989, a team of American and Canadian biologists announced that they had found the site of the gene which, when defective, gives rise to cystic fibrosis. Indeed, not only had they located the gene, they had analysed the sequence of letters within it and had identified the mistake responsible for the condition. At the least, these scientific advances may offer a way of screening parents who might be at risk of transmitting a single-gene defect to any children that they conceive. Foetuses can be tested while in the womb, and if found free of the genetic defect, the parents will be relieved of worry and stress, knowing that they will be delivered of a baby free from the disorder.

In the mid-1980s, the idea gained currency within the scientific world that the techniques which were successfully deciphering disorder-related genes could be applied to a larger project: if science can learn the genetic spelling of cystic fibrosis, why not attempt to find out how to spell 'human'? Momentum quickly built up behind the Human Genome Project and its objective of 'sequencing' the entire genome - writing out all the letters in their correct order.

But the consequences of the Human Genome Project go far beyond a narrow focus on disease. Some of its supporters have made claims of great extravagance - that the Project will bring us to understand, at the most fundamental level, what it is to be human. Yet many people are concerned that such an emphasis on humanity's genetic constitution may distort our sense of values, and lead us to forget that human life is more than just the expression of a genetic program written in the chemistry of DNA.

If properly applied, the new knowledge generated by the Human Genome Project may free humanity from the terrible scourge of diverse diseases. But if the new knowledge is not used wisely, it also holds the threat of creating new forms of discrimination and new methods of oppression. Many characteristics, such as height and intelligence, result not from the action of genes alone, but from subtle interactions between genes and the environment. What would be the implications if humanity were to understand, with precision, the genetic constitution which, given the same environment, will predispose one person towards a higher intelligence than another individual whose genes were differently shuffled?

Once before in this century, the relentless curiosity of scientific researchers brought to light forces of nature in the power of the atom, the mastery of which has shaped the destiny of nations and overshadowed all our lives. The Human Genome Project holds the promise that, ultimately, we may be able to alter our genetic inheritance if we so choose. But there is the central moral problem: how can we ensure that when we choose, we choose correctly? That such a potential is a promise and not a threat? We need only look at the past to understand the danger.

Glossary
'DNA Deoxyribonucleic acid, molecules responsible for the transference of genetic characteristics.
² eugenics The science of improving the qualities of the human race, especially the careful selection of parents.

Questions 27-32

Complete the sentences below (Questions 27-32) with words taken from Reading Passage 3. Use NO MORE THAN THREE WORDS OR A NUMBER for each answer. Write your answers in boxes 27-32 on your answer sheet.

Example   **Answer**

The passage compares the genetic instructions in DNA   to   **chemical** letters

27   The passage compares the Project in scale to the.....................................

28   The possible completion date of the Project is.....................................

29   To write out the human genome on paper would require.....................................
books.

30   A genetic problem cannot be treated with drugs because strictly speaking it is not
a.....................................

31   Research into genetic defects had its first success in the discovery of the cause of one
form of.....................................

32   The second success of research into genetic defects was to find the cause of

Classify the following statements as representing

>   A   *the writer's fears about the Human Genome Project*
>   B   *other people's fears about the Project reported by the writer*
>   C *the writer's reporting of facts about the Project*
>   D   *the writer's reporting of the long-term hopes for the Project*

*Write the appropriate letters **A-D** in boxes 33—40 on your answer sheet.*

33   The Project will provide a new understanding of major diseases.

34   All the components which make up DNA are to be recorded and studied.

35   Genetic monsters may be created.

36   The correct order and inter-relation of all genetic data in all DNA will be mapped.

37   Parents will no longer worry about giving birth to defective offspring.

38   Being 'human' may be defined solely in terms of describable physical data.

39   People may be discriminated against in new ways.

40   From past experience humans may not use this new knowledge wisely.

WRITING TASK 1

You should spend about 20 minutes on this task.

The table below shows the figures for imprisonment in five countries between 1930 and 1980.

Write a report for a university, lecturer describing the information shown below.

You should write at least 150 words.