

**MAJLIS PEPERIKSAAN MALAYSIA**

(MALAYSIAN EXAMINATIONS COUNCIL)

**Instructions to candidates:**

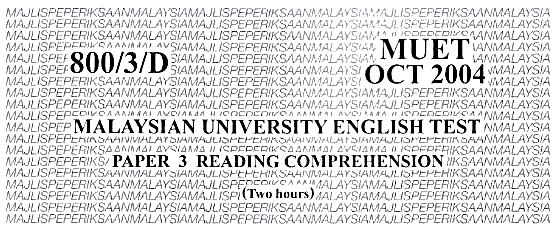
*Candidates are advised to refer to number* **32** *on page* **10** *of paper 800/3/D. The original answer options for that question are* **cancelled** *and* **replaced** *with the new answer options as follows.*

The new answer options for No. **32** are

1. I and III
2. II and IV
3. I, III and IV
4. II, III, and IV

**This question paper consists of 17 printed pages and 3 blank pages.**

**©** Majlis Peperiksaan Malaysia 2004

****

**MAJLIS PEPERIKSAAN MALAYSIA**

(MALAYSIAN EXAMINATIONS COUNCIL)

**Instructions to candidates:**

**DO NOT OPEN THIS QUESTIONS BOOKLET UNTIL YOU ARE TOLD TO DO SO.**

*There are fifty questions in this test. For each question, choose the most appropriate answer.*

*Indicate your answer in the separate answer sheet given.*

*Read the instructions on the answer sheet carefully.*

*Attempt* **all** *questions.*

**This question paper consists of 17 printed pages and 3 blank pages.**

**©** Majlis Peperiksaan Malaysia 2004

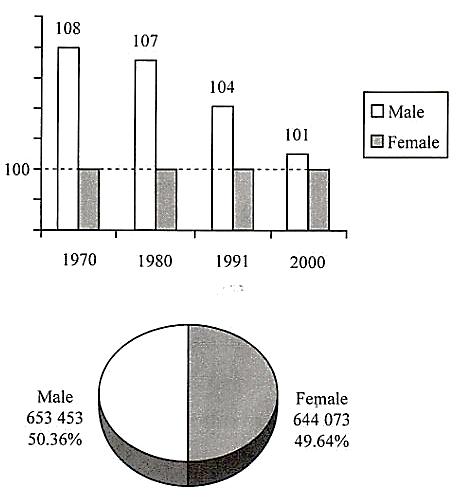
*Questions* ***1*** *to* ***15*** *are based on the following passage.*

Ever wondered who invented those reﬂectors in the middle of the highway? He was an Englishman named Percy Shaw who (1) \_\_\_\_\_\_ the bright idea from cats’ eyes. One (2) \_\_\_\_\_\_ in 1934, Shaw was driving home along (3) \_\_\_\_\_\_ quiet, foggy road. It was late and (4) \_\_\_\_\_\_ could hardly see anything. Suddenly he caught (5) \_\_\_\_\_\_ of twin points of yellow light reﬂected (6) the car’s headlights. He braked hard immediately (7) \_\_\_\_\_\_ came to a skidding halt. He quickly (8) out of the car and discovered his (9) hanging precariously over a sheer cliff. Shaw (10) \_\_\_\_\_\_ he had been saved from a ﬁery (11) \_\_\_\_\_\_ by the luminous eyes of a cat (12) \_\_\_\_\_\_ had been sitting on a stone wall. (13) \_\_\_\_\_\_ 1953 Shaw founded his company, Reﬂecting Roadstuds Ltd. to (14) \_\_\_\_\_\_ ‘Cat’s Eyes’. Today, his ‘Cat’s Eye’ can be seen (15) \_\_\_\_\_\_ along highways all over the world.

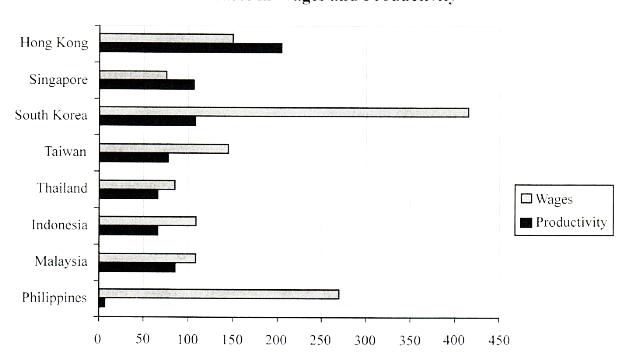
*Questions* **16***to* **19** *are based on the charts given below.*

The Department of Statistics recently released Population and Housing Census of Malaysia 2000. The census showed that while the male population (16) \_\_\_\_\_\_ the female in Kuala Lumpur, the gap (17) \_\_\_\_\_\_. Out of Kuala Lumpur’s total population of 1 297 526, men made up 653 453 as opposed to 644 073 women. The ratio between males and females in Kuala Lumpur had (18) \_\_\_\_\_\_ from 108 males to every (19) \_\_\_\_\_ females in 1970, down to 101 for the year 2000.

**Population Sex Ratio for Kuala Lumpur**

****

Questions 2010 22 are based on the following chart.

**Increases in Wages and Productivity**

(Adapted from The Star, January 24, 2001)

*Questions* **23** *to* **30** *are base on the following passage.*

In the year 2000, thousands of cattle, sheep and goats in Yemen, in the Middle East, began to suffer from fevers, vomiting and reduced milk yields. Within weeks, 1800 animals had died, while 7800 female animals aborted their foetuses. The afﬂliction, Rift Valley fever, had never been seen outside Africa before. The disease can pass, via mosquitoes or contaminated blood, to people from animals. Human victims suffer from diarrhoea, nausea and internal bleeding. In Yemen, the outbreak killed more than 100 people.

The leap of Rift Valley fever across the Red Sea from Africa to Yemen — like the scourge of mad-cow disease ravaging European herds or Britain’s outbreak of foot-and-mouth disease — represents a w0n'ying trend: the globalisation of animal diseases. Just as more people are roaming the globe and spreading germs along the way, so are animals, sometimes with devastating results.

“More people are travelling, more animals are being moved around, and there’s greater trade.” Says David Pimental, professor of ecology and agricultural sciences at Cornell University in Ithaca, New York. “It increases the probability that you’re going to carry diseases from one location to another.”

Spurring that trade is growing demand for meat as more people in developing countries rise into the middle class and diversify their diets. The international meat trade grew an average of 9% annually over the past decade, according to the United Nations Food and Agriculture Organisation in Rome.

The U.S. Agricultural Research Service estimates that livestock disease costs the American economy more than $17.5 billion a year. In developing countries, the cost of disease in livestock is about 17% of production costs, while the ﬁgure is at least twice as high for poorer countries, according to the ARS, a part of U.S. Department of Agriculture.

Higher demand for livestock has led to bigger farms, with more animals crammed into smaller spaces. This intensive production can hasten the spread of diseases. At the same time, the slaughtering and meat-processing industry had consolidated into fewer, larger players. Foot-and-mouth disease — so contagious that it can spread by a gust of wind — has long been endemic to certain developing countries, but in the past two years it has re-emerged in Japan, Greece, Brazil, Uruguay and more recently Britain.

A 1997 outbreak in Taiwan devastated that country’s pig population, forcing authorities to slaughter a quarter of the country’s 14 million pigs. This destroyed what had been a $1.5 billion-a-year pork export industry. “The most likely cause of the Taiwan episode was someone bringing back contaminated meat from the

Chinese mainland which was later given to the animals,” suggests Mike Kelly, research programme safety ofﬁcer at the ARS, referring to the 1997 outbreak. Because the disease can be carried in meat, German border officials have been seizing sandwiches carried by travellers from Britain which recently had an outbreak of foot-and-mouth disease. In fact, some countries require people coming from Britain to douse their shoes in disinfectant.

In recent years, most countries have tightened their defences against foreign disease by imposing stricter quarantines, testing of animal products and outright ban on certain imports. Still, some health experts argue that animal diseases will always ﬁnd ways to sneak through man-made borders. Says Prof. Pimental of Cornell University, “I don’t think we’ve been careful enough in any nation to protect ourselves from such diseases.”

(Adapted from *The Asian Wall Street Journal,* March 2001)

*Questions* **31** *to* **36** *are based on the following passage.*

A Malaysian company is introducing two types of machinery to ‘ﬁberise’ empty fruit bunches (EFB), trunks and fronds of palm oil trees. EFBs are oil palm fruits whose oil have been extracted.

It is also launching natural ﬁbre mats, called Ecomat, made from oil palm residues for agricultural use. In addition, it is producing natural processed ﬁbres for a range of uses, including cushions and car thermoplastic components. The two equipment, Ecoﬁbrex Super and Ecoﬁbrex Premier, could chum out ﬁve to ten tonnes of ﬁbre per hour respectively. The ﬁbre from Premier is suitable for making mulching mats, animal feed and compost. They could also be used as fuel for boilers.

Fibres from Super are of a more reﬁned quality suitable as raw materials for the manufacture of such commodities as particle boards, pulp and paper, wall insulation and mattresses.

The company is advocating a waste to wealth principle to optimise returns from oil palm trees while also playing a role in environmental conservation.

Currently, EFBs are incinerated, used as raw mulching and in some places simply dumped in plantations to decompose. All three methods pose different problems. If they are burnt, maintenance of incinerators costs between RM80, 000 and RM100, 000 a year. There is also a potential health risk to workers who maintain the incinerators. Letting them rot in plantations create breeding grounds for a certain species of beetles which feed on oil palm seedlings.

The two types of machinery, whose prices range between RMl50, 000 and RM250, 000 depending on their usage, would help, solve part of the problem. The objective of the company is not only to’ make, sell and market the two lines of machinery and Ecomat for mulching. It is also involved in research and development to explore innovative related products. For example, it is researching the growth rate of oil palm trees and the quality of that growth with plants that use Ecomat as opposed to those that do not.

Mulching is a method for soil conditioning. It helps to retain moisture, thereby contributing to its quality to enhance plant growth, particularly in hot countries and hilly terrains. Mulching can be done using empty fruit bunches, wood chips or plastic mats but the company’s Ecomat, made without any chemicals, is a cheaper, more efﬁcient and environmentally healthier alternative.

Ecomats placed around the plant prevent weed growth, retain moisture and maintain conducive pH balance of the soil. The intrinsic quality of Ecomat helps 35 maximise the use of fertilisers as they are retained within their natural ﬁbre and gradually released into the ground.

Ecomat is a purely organic and biodegradable product with a life span of about a year on the ground, after which new Ecomats may be placed on top of the previous ones if required.

They also conform to the ground, which means that they are ideal even for sloping and uneven surfaces. Such a quality also makes it effective for landscaping and soil erosion control.

It is a better method than using plastic mats that do not allow for full penetration of water on the ground, much needed by young palms in particular. Furthermore, water retention on plastic encourages mosquitoes to breed. As for using EFBs for mulching, it is labour intensive, as workers need to place 50 to 60 EFBs around a single plant. EFBs also encourage a species of beetles to breed within the pile. These pests later feed on oil palm seedlings.

The company is producing about 1000 tonnes of Ecomats a month. It hopes to increase the figure to 3000 tonnes by the end of the year. The mats are produced in a factory in Johor.

(Adapted from *The Star,* Monday, January 15, 2001)

*Questions* **37 to 43** *are based on the following passage.*

Everyone must have at least one personal experience with a computer error by this time. *Bank balances are suddenly reported to have jumped from $379 into the* *millions,* appeals for charity contributions are mailed over and over again to people with crazy sounding names at your address, department stores are sending the wrong bills and utility companies write that they are turning everything off, that sort of thing.

If you manage to get in touch with someone and complain, you then get instantaneously-typed letters of apology from the same computer, saying "Our computer was in error and an adjustment is being made in your account."

These are supposed to be the sheerest blindest accidents. Mistakes are not believed to be part of the normal behavior of a good machine. If things go wrong it has to be a personal human error, the result of fingering, tampering, button getting stuck, or someone hitting the wrong key. The computer at its normal best, is infallible.

I wonder whether that can be true. After all, the whole point of computers is that they represent an extension of the human brain, vastly improved upon but nonetheless human, super-human may be. A good computer can think clearly and quickly enough to beat you at chess and some of them have even been programmed to write obscure verse. They can do anything we can do, and more.

It is not yet known whether a computer has its own 'conscious' and it would be hard to find out about this. When you walk one of those great tall new halls now built for the huge machines, and stand listening, it is easy to imagine that the faint, distant noises are sounds of thinking, and the turning of the spools gives them the look of wild creatures rolling their eyes in the effort to concentrate, choking with information. But real thinking, and dreaming, is other matters.

On the other hand, the evidences of something like an *unconscious,* equivalent to ours are all around. As extensions of the human brain, they have been constructed with the same property of error - spontaneous, uncontrolled, and rich in possibilities. Mistakes are at the very base of human thought, embedded there, feeding the structure like root nodules. If we were not provided with the knack of being wrong, we could never get anything useful done. We learn, as we say, by trial and error. "Why do we always say that? Why not trial and rightness" or "trial and triumph?" The old phrase puts it that way because that is, in real life, the way it is.

A good laboratory, like a good bank or a corporation or government has to run like a computer. Almost everything is done flawlessly by the book and all the numbers add up to the predicted sums. The days go by. And then, if it is a '*lucky'* day, and a lucky laboratory, somebody makes a mistake: something is added in one of the blanks, a decimal is misplaced in reading. Whatever, when the results come in, something is obviously wrong, and then the action can begin. The misreading is not the important error: it opens the way. The next step is the crucial one. If the investigator can bring him up to say, "But even so, look at that!" then the new finding is ready for snatching. Progress is the move based on the error.

We are at our human finest, dancing with our minds. When there are more choices than two. Sometimes there are ten even twenty different ways to go, all but one hound to be wrong and the richness of selection in such situations can lift us into totally new ground. This process is called exploration and it is based o human fallibility. If we had a single centre in our brains, capable of responding only when a correct decision was to be made. Instead of the jumble of different solutions that can be discovered, *we would only stay the way we are today, stuck fast.*

(Adapted from A Reader for Writers, 1983.

Indiana: The Bobbs-Merrill Company, Pg 454-456)

*Questions* **44** *to* **50** *are based on the following passage.*

What do we really want when we communicate with someone else? We might need a question answered; perhaps we need to affirm that a job is being done correctly; or maybe we just need to be heard. All of us have a very strong need to have other people hear us, understand us, and process the information we give them. This need is so strong that when listening is purposely withheld, our self esteem suffers.

This tremendous need to be listened to is crucial to human relations. We should realize that other people have this need as much as we have. You’ll be amazed at the results you can get when you tune into other people and their needs. The need to be a good listener to others is open ignored by people who consider themselves good communicators. In fact, nearly every one is a poor listener. In a much quoted article in Harvard Business Review, Ralph Nichols and Leonard Stevens wrote, "lmmediately after the average person has listened to someone talk, he remembers only half of what he heard — no matter how carefully he thought he was listening...Two months alter listening to a talk, the average listener will remember only about 25 per cent of what was said." Other recent studies have reached similar conclusions. What makes us miss much of what we hear?

**Selective Listening**. Let’s start with some of the more legitimate reasons for poor listening. In our society, we are bombarded with messages. Because we couldn’t possibly give our full attention to all these messages, we practice selective listening. If we are in a personal environment with even more demands on our attention, the problem is even greater. For example, picture a home with young children chattering and trying to get attention. Parents often become selective listeners just to retain their sanity. Thus, information overload is one cause of poor listening skills. Many other reasons for poor listening skills, though, come from habits we have established throughout our lives. For example, when a subject seems difficult or above our level of ability, we often fail to listen — when, if we had listened, we would have seen how clear and understandable the subject was. The opposite often happens, too. We might reject a speaker because the message seems too basic, beneath our level of knowledge. In either case, the message is lost.

When we are in a group listening to a single speaker, we can easily allow our minds to wander. If we are attending a business meeting or conference, the success of the meeting can be destroyed by this habit. One reason for this tendency is that we have a capacity for listening at a speed that far exceeds the speed of the fastest speaker. We could listen and comprehend up to 500 words per minute; the average public speaker travels through a message at about 125 words per minute. How we spend that extra time and energy often determines our effectiveness as listeners.

**Tuning Out**. Sometimes we simply refuse to listen to our co-workers, when out of prejudice. Some people won’t listen to members of races they consider inferior; some men won’t listen to women. Prejudice can be subtler than these examples, though. What about a person who looks unintelligent to the listener, or whose appearance is in some way unattractive? Prejudice can also overlap with jealousy. What about a speaker who seems just a little too perfect? We need to watch our listening habits and rule out these types of prejudice. The process of doing business can be hampered by prejudice.

Clearly, there are many reasons why we do not hear what our co-workers are really saying. Listening expert Anthony Allesandra believes there is one major cause underlying most of our poor listening habits. From childhood we have been taught that talking requires energy, attention and organization, but that listening is a passive, compliant position. From kindergarten onward, we are taught to be assertive, to express ourselves effectively. But until recently, little has been done to teach us active listening, as Dr. Allesandra calls it.