

**MAJLIS PEPERIKSAAN MALAYSIA**

**(MALAYSIAN EXAMINATIONS COUNCIL)**

Instructions to candidates:

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

*There are 50 questions in this test. For each question, choose the most appropriate answer.*

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

*Read the instructions on the answer sheet carefully.*

*Attempt all questions.*

**This question paper consists of 16 printed pages.**

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

Eggs are used by the gallon by bakeries, hotels, fast food joints and companies that sell everything from cake mixes to mayonnaise to shampoo. This results tons of egg shells (1) \_\_\_\_\_\_\_\_ discarded. With the membrane attached, they may (2) up as chicken feed or fertilisers. In (3) , the discards will be buried in landfills. (4)\_\_\_\_\_\_\_\_technique developed by MacNeil, an American scientist, (5)\_\_\_\_\_\_\_\_ separates the shell from the membrane has (6) the industry. This new technique results in (7) \_\_\_\_\_\_\_\_ pure calcium carbonate, which could be put (8) good use for the making of vitamin (9) , toothpaste, and as a substitute for pulp. (10)\_\_\_\_\_\_\_\_valuable is the membrane which is a (11)\_\_\_\_\_\_\_\_\_ source of collagen, a protein. It is (12) in a wide variety of medical body (13) \_\_\_\_\_\_\_ such as heart valves and sponges. MacNeil (14) the technique after years of trying just (15) \_\_\_\_\_\_\_\_\_everything. In the course of it, he pounded the shells, ground them, used acid and even sandpapered them to find out if separation was possible.

*Questions* **16** *to* **18** *ate based on the following passage*

Table A shows the number of patients who were admitted to public hospitals in the country from July 1995 to June 1999. There were increases in the number of admissions over the four-year period, rising from approximately 0.5 million in 1995/1996 to 0.6 million in 1998/1999, an increase of 18.2%. This excluded outpatient visits that also increased by 20.2%. The yearly overall increase in the admission numbers were 110491, 62436 22006 (2%, 11.7% and 3.7%) respectively in the three years between July 1996 to June 1999, over the previous year. In 1997/1998 the increase was much higher than the previous year or the year after. Although the percentages of increases in the years 1996/1997 and 1998/1999 were smaller when compared to 1997/1998, the numerical increment in patients admitted to hospitals was still in the thousands.

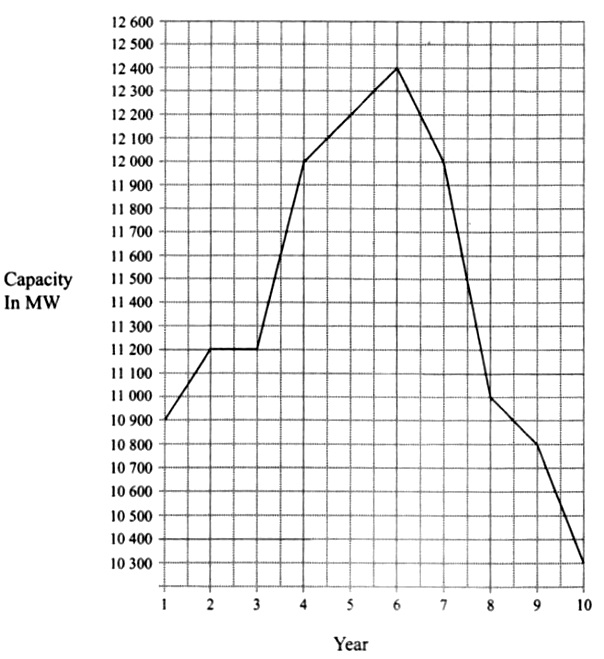
Table A: (16) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Year of admission | 1995/1996 | 1996/1997 | 1997/1998 | 1998/1999 |
| Total admissions | 521 494 | 531 985 | 594 421 | 616 427 |
| 17 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  | 10 491 | 62 436 | 22 006 |
| Over previous year (% increase over previous year) |  | (2.0) | 18 ( \_\_\_\_\_\_\_) | (3.7) |

*Questions* **19** *to* **22** *are based on the graph and passage.*

The picture of electricity generation in our region is not particularly rosy. If we look at the statistics over the last 10 years we can see an increase during the (19) of the period; and then a steady decrease over the last 4 years. In year 1, for example when the new region was established, capacity stood at 10 900 megawatts. This was to provide electricity for domestic and industrial users. This figure increased in the 2nd year by 300 megawatts, giving us a capacity of 1I 200 megawatts. This represented a moderate rise in line with national trends. However, capacity in the 3rd year (20) 11 200 megawatts. This was as a result of the increase in electricity tariffs for consumers. In response to this price increase, local industry introduced measures to conserve energy. The 4th year saw an improvement, with a rise of 800 megawatts for the region. This was, in fact, quite a substantial increase, and was mainly caused by a number of new domestic users. We looked forward to a continued rising trend. The trend did continue, but in year 5 capacity only went up by (21) megawatts to 12 200 megawatts. Again the price increase led to a policy of energy conservation. And with the high rate of inflation that year, many users took steps to reduce their electricity consumption. The following year, year 6, we reached our peak, and capacity rose to 12 400 megawatts. In year 7 we saw a drop to 12 000 megawatts - which, in fact, represented a fall to the level of year (22) . That was the year in which local industry began to suffer from the recession. In year 9, the downward trend continued at a much more dramatic rate and this seems to be the trend for the next year or two.

**Electricity Generating Requirements**

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19

*Questions* **23** *to* **29** *are based on the following passage*.

When the roll of eye diseases is called in the developing world, the response was as follows: as many as nine million people blinded by trachoma, one million by river blindness and 350000 new cases in children each year of a blindness caused by a severe deficiency of vitamin A.

In Geneva, World Health Organisation (WHO) programme manager, Bjorn Thylefors, reported progress in some areas. A new drug, Ivermectin, fights the parasite that causes river blindness. The disease draws its name from the fact that the blackfly, which transmits the parasite through its bite, breeds in fast-flowing rivers. The effectiveness of the treatment is tempered by the difficulties of distributing the drug among the rural population.

In Indonesia and Guatemala, programmes to fortify food so that children get the needed amount of vitamin A have also met with some success. But "more must be done in other countries or the disease will likely increase," said Thylefors.

Trachoma, caused by an organism, Chlamydia trachomatis, could be dispelled by antibiotic but the disease inevitably returns through poor hygiene. Repeated infections scar and tighten the inner eyelid and over the years, the eyelashes are pulled under the eyelids. Each time a person blinks, the ingrown lashes scrape the cornea like a garden rake.

The hot, dusty area of central Tanzania is a notorious breeding ground for trachoma because of poor hygiene and the scarcity of water. To fight the disease, an audacious hypothesis was constructed: If mothers can be encouraged to wash their children's faces, especially the eyes, at least once a day, transmission might be interrupted. This was easier said than performed in a region where adolescent girls must walk miles to wells to fill a small water gourd that they bring home atop their heads.

Rehabilitation programmes for the blind also need to be instituted. For example, Sidney Katala, an ophthalmic nurse, supervises a programme in which blind residents of Ibwaga village learned to walk with canes and grow a modest crop of peanuts. Sixty-five-year old Mwaluko Magawa, who is blinded by trachoma, tells that he is proud to be able to plant and harvest a crop. Katala helped to build a small mud hut for crop storage and thorns were placed across its entrance as a deterrent, not for the blind but for the sighted.

(Adapted from *Journal of Medical Science, Vol Xl*)

23

*Questions* **30** *to* **36** *are based on the following passage.*

The majority of the world's poorest people spend most of their time gathering or growing food, carrying water and collecting fuels and other useful natural materials. These farmers, herders own few possessions. On marginal and overcrowded land, soil nutrients become depleted when farmers sow the same strains of rice or millet every year, or even every season, and use animal dung as fuel rather than to fertilize the earth. Over-grazing causes soil erosion. Thus the standard of living will often decline still further.

Poverty tends to be self-perpetuating. Those who are born into poorer families have limited access to education, job opportunities and the means of changing their condition. Illiteracy compounds the problem, for it limits people's capacity to learn new ideas and adopt new methods of work. So while others increase their wealth, status and influence, the gap between rich and poor grows wider. Peasants and labourers may easily be exploited. A tenant who cannot produce enough from his land to pay his rent and feed his family has to find a labouring job in the village. A small farm owner may have to pay high interest rates to a money-lender to tide him over the months when his land cannot provide enough food for his dependents. A labourer may be forced to work to the limit of his capacity for low wages or risk losing his job in a community where there are plenty of unemployed people ready to take his place.

Although forecasts for many regions, such as South-west Asia, are pessimistic, experts in some poverty-stricken areas have shown the way to overcome that marginal difference between bare subsistence and a reasonable standard of nutrition· For example, an Indian scientist, Noor Muhammad, has made comparisons between a number of villages in part of the state of Uttar Pradesh in northern India. He shows how it is possible, even without help from outside, for farmers to improve yield. This could be done by one or more of the following means: crop rotation, organic fertilization or drainage to improve the soil quality. The excess water could also be used for rice cultivation or legumes could be planted on the wasteland to reduce soil erosion and supplement the soil nitrogen. Another method is to allow medium quality lands to be left fallow rather than double-cropped and early-maturing trees to be planted on the wasteland to provide firewood.

International help has been vital in the relief of suffering caused by emergencies such as war or natural disasters, when the poorest sectors of the population are usually the most vulnerable. Long-term aid is even more important. Nevertheless, aid and development projects do not always help the poor. Some modern analysts have shown how powerful nations manage to extend their economic control over a strategic area by this means. Susan George in *How the Other Half Dies - The Real Reasons for World Hunger*, quotes examples of large agricultural enterprises in South Korea financed from proceeds of Food for Peace which actually enabled large US food companies to establish their "agribusiness" operations there.

Recent advice from experts suggests that aid projects should bypass governments and strong local leaders. They should satisfy the basic needs of the poorest 40% of the world's population directly, for these people have not generally benefitted from previous aid programmes. Most aid organizations have stressed the importance of allowing communities to make their own decisions and enabling them to help themselves. For example, some projects finance a single item, such as a boat, a tractor or a water pump, which a community may need. Little outside help should be needed after that. Other "self-help" projects supply high quality grain seedlings, herd animals or chickens, to increase food production.

Effective solutions to the problem of world poverty require fundamental changes in the wealthier nations, including those in Asia. At present a 55 significant proportion of the world's limited resources is being used either to prepare for war or to support the affluent lifestyle of the world's people. For centuries the Westerners have prided themselves on their ability to develop new regions and resources for the benefit of humanity. We are now realizing that this cannot be called progress if it impoverishes the earth and most of its inhabitants.

(Adapted from *Asian Heritage* by Estelle Mckenzie)

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

Herbalism is the oldest system of medicine in the world and the honour and respect for herbs in all cultures have long been confirmed by archaeological findings. Today, herbalism can no longer be considered a 'country cousin' to conventional medicine. It is fast gaining recognition as more and more people have experienced its potency. A recent survey indicated that more than 40 per cent of general practitioners today no longer have qualms recommending them as complementary medicine to patients. Even the United Nations in the World Health Organization recommends and assists traditional herbal medicine in all cultures and nations. According to Alan Hopkins, a herbalist in Christchurch, herbal medicine is the 'safest and the most reliable form of medicine in the world.'

No one can seriously dispute the benefits of herbalism. Today, about 70 per cent of drugs in conventional medicine contain a plant origin. Herbs are said to be safer in comparison to orthodox drugs as they contain fewer additives and hence produce fewer side effects. While people in the West consult herbalists when they are ill, herbalism adherents in the East especially the Chinese, use them to maintain good health. Herbalists believe that herbs are able to support and stimulate the system of the body which is under-responsive, and relaxes the part which is over-active. In this way, the changes implemented bring about healing and restore good health to the patient.

Herbalists claim that herbs can be used to treat a number of problems. For example, basil is used both as a general tonic and as a treatment for digestive problems. Camomile is used for treating insomnia, tension, dyspepsia and tension headaches. The passionflower is believed to be good for stomach contractions, restlessness and irritability, whilst valerian is a boon for ailments such as stress, anxiety, nervous tension and other emotional problems. Clove helps relieve diarrhoea, hernia and bronchitis. Their powerful antiseptic and mild analgesic actions are believed to be good for gum infections and aching teeth. It is also used to treat skin conditions like scabies and athlete's foot. *Cordyceps*, a fungus that grows on dormant worms is often used as a health tonic because of its ability to improve stamina, energy, appetite, and endurance. Latest research in China claims that it can also be used in treating shortness of breath, asthma and bronchitis. No one can dispute the miracles of the ginseng plant. Dr. Brekham, who spent 25 years experimenting on the effects of ginseng, concluded that ginseng stimulates both physical and mental activity. It defends the human system from the effects of prolonged physical strain and acts as a mental stimulant without the side effects of other stimulants.

The efficacy of herbalism however does not satisfy everyone. Dr. John Neeld Jr., the President of the American Society of Anaesthesiologists, recently issued a warning to consumers using herbal remedies to stop taking the products at least two to three weeks before surgery. Doctors emphasize that patients run a risk as some herbs may have some dangerous interactions with the variety of drugs used to anaesthetize patients during surgery. Herbalism critics are also quick to point out that some herbs contain potent, even toxic chemicals that can prove to be fatal. The sceptics also point out that herbal medicines can become contaminated as environmental factors such as soil, climate and seasons can alter the subtle balance of the active chemicals in herbs. Critics also go on to argue that not all herbs actually undergo the same rigorous long-term safety measures and testing that conventional drugs undergo before they are marketed

*Herbalists are quick to counter these allegations*. They claim that they draw on a rich heritage and their knowledge enables them to distinguish herbs that are dangerous and those, which are safe. Reputable commercial manufacturers also claim that they employ stringent quality control in the preparation of their herbal products.

So how is the man on the street supposed to react to all this'? Mark Greener. A pharmacologist and medical journalist advises people to practise moderation and to always consult a qualified herbalist before taking any herbs. He puts in a word of caution: *"Just because it is natural it does not mean it is safe”*

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

The goal of the writer is to create a momentary common ground between the reader and writer. You want the reader to share your knowledge and your attitude toward that knowledge. Even if the reader eventually disagrees, you want him or her to be able for the moment to see things as you see them. A good piece of writing closes the gap between you and the reader.

ANALYZE YOUR AUDIENCE. The first step in closing that gap is to gauge the *distance* between the two of you. Sometimes, obvious differences such as age org background will be important, but the critical differences for writers usually fall into three areas: the reader’s knowledge about the topic; his or her attitude toward it, and his or her personal or professional needs.

KNOWLEDGE. This is usually the easiest difference to handle. What does your reader need to know? What are the main ideas you hope to teach? Does your reader have enough background knowledge to really understand you? If not, what would he or she have to learn?

ATTITUDES. When we say a person has knowledge, we usually refer to his conscious awareness of explicit facts and clearly defined concepts. This kind of knowledge can be easily written down or told to someone else. However, much of we “know” is not held in this formal, explicit way. Instead it is held as an attitude or image – as a loose cluster of associations. For instance, my image of lakes includes associations many people would have, including fishing, water skiing, stalled outboards, and lots of kids catching night crawlers with flashlights. However, the most salient or powerful parts of my image, which strongly colour my whole attitude toward lakes, are thoughts of cloudy skies, long rainy days, and feeling generally cold and damp. By contrast, one of my best friends has a very cluster of associations: to him a lake means sun, swimming, sailing, and happily sitting on the end of a dock. Needless to say, our differing images cause us to react quite differently to a proposal that we visit a lake.

As you can see, a reader’s image of a subject is often the source of attitudes and feelings that are unexpected and, at times, not influenced by mere facts. A simple statement that seems quite persuasive to you, such as “Lake Wampago would be a great place to locate the new music camp”, could have little impact on your reader if her or she simply doesn’t visualize a lake as a “great place”. In fact, may people accept uncritically any statement that fits in with their own attitudes – and reject, just as uncritically, anything that does not.

Whether your purpose is to persuade or simply to present your perspective, it helps to know the image and attitudes that your reader already holds. The more these differ from your own, the more you will have to do to make him or her see what you mean.

NEEDS. When writers discover a large gap between their own knowledge and attitudes and those of the reader, they usually try to change the reader in some way. Needs, however, are different. When you analyse a reader’s needs, it is so that you, the writer, can adapt to him. The ability to adapt your knowledge to the needs of the reader is often crucial to your success as a writer. In college, where the reader is also a teacher, the reader’s needs are little less concrete but just as important. Most papers are assigned as a way to teach something. So the real purpose of a paper may be for you to make connections between two historical periods, to discover for yourself the principle behind a laboratory experiment, or to develop and support your own interpretation of a novel. A good college paper doesn’t just rehash the facts; it demonstrates what your reader, as a teacher, need to know – that you’re learning the thinking skills his or her course is trying to teach.

Effective writes are not simply expressing what they know. Instead that are using their knowledge: reorganizing, maybe even rethinking their ideas to meet the demands of an assignment or the needs of their readers.