

Part I

Read the following passage and choose the best answer to fill the blanks from the choices given. Then blacken the number of your choice on your answer sheet. There are 15 blanks. (Nos. 1-15)

Many people laugh contemptuously when they hear of "siesta," the Spanish tradition of napping or having a short period of sleep in the middle of the day. However, recently scientists indicated that the human body 1. \_\_\_\_\_ have an afternoon nap.

A wide range of scientific studies suggest that 2. \_\_\_\_\_ a strong biological tendency for people to fall asleep in the middle of the afternoon 3. \_\_\_\_\_ they have had a full night's sleep. In a series of studies, volunteers 4. \_\_\_\_\_ in an underground room for weeks. They were completely isolated from all 5. \_\_\_\_\_ of time. The volunteers were told 6. \_\_\_\_\_ whenever they wanted. Without any 7. \_\_\_\_\_ to external time measures, the volunteers tended to sleep in two time periods – one long session at night and another shorter one 8. \_\_\_\_\_ lasted for about 2 hours in the afternoon. The naps typically 9. \_\_\_\_\_ 12 hours after the middle of the longer period of sleep.

10. \_\_\_\_\_ source of evidence is the napping behavior of children. 11. \_\_\_\_\_ with frequent naps all through the day, children give up the last nap in the middle of the afternoon. 12. \_\_\_\_\_, there is repeated evidence that performance drops in the mid-afternoon – and accidents 13. \_\_\_\_\_ from sleepiness increase at this time.

14. \_\_\_\_\_, rather than being a function of any culture, naps seem to be a(n) 15. \_\_\_\_\_ human need. Now you don't need to feel guilty about your afternoon snooze!

- |     |                 |                       |                      |                         |
|-----|-----------------|-----------------------|----------------------|-------------------------|
| 1.  | 1. meant to     | 2. meant for          | 3. was meant to      | 4. was meant for        |
| 2.  | 1. it is        | 2. there is           | 3. it has            | 4. there are            |
| 3.  | 1. even if      | 2. regardless of      | 3. despite           | 4. whether              |
| 4.  | 1. were put     | 2. should be put      | 3. were putting      | 4. should have been put |
| 5.  | 1. scales       | 2. pointers           | 3. criteria          | 4. indicators           |
| 6.  | 1. not to sleep | 2. not to be sleeping | 3. to sleep          | 4. to be sleeping       |
| 7.  | 1. referral     | 2. referring          | 3. reference         | 4. being referred       |
| 8.  | 1. only         | 2. entirely           | 3. when              | 4. which                |
| 9.  | 1. followed     | 2. happened           | 3. appeared          | 4. woke up              |
| 10. | 1. Another      | 2. Others             | 3. Other             | 4. The others           |
| 11. | 1. Begin        | 2. Begun              | 3. Began             | 4. Beginning            |
| 12. | 1. Nonetheless  | 2. Additionally       | 3. After all         | 4. In contrast          |
| 13. | 1. result       | 2. resulting          | 3. as a result       | 4. resulted             |
| 14. | 1. Thus         | 2. Similarly          | 3. On the other hand | 4. Consequently         |
| 15. | 1. inborn       | 2. insufficient       | 3. artificial        | 4. traditional          |

Instructions

Part II-VI

Read the passages and choose the best answer for each question. Then blacken the number of your choice on your answer sheet. There are 45 items in Part II-VI (Nos. 16-60).

Part II

Smarting over dumb ideas

Today we have Smart bus stops, Smart taxi stands, Smart street signs and now a Smart pedestrian crossing. Soon we will have Smart cards for ID's. All very commendable schemes and taking the Land of Smiles in the right direction. What we now need are Smart ministers. One definition of smart is "characterized by a sharp quick thought, bright" and this applies to the thinking behind Khun Apirak's ideas.

5 Another definition of smart is "to suffer or pay a heavy penalty" and this applies to the government's proposed even earlier closing of petrol stations. I would like to see a coherent justification with supporting evidence to show the need to close stations earlier. I, for one, am not in the habit of driving for the sake of driving; I do what I need to, to get to work and buy the necessary items with which to survive. I would suggest that most people are of the same thought: why would we choose to drive for no reason?

10 So I would like an explanation of how the early closing of stations will have any positive impact on energy saving measures.

*BEMUSED IN BANGKOK*

16. The main idea of the text is \_\_\_\_\_.
1. the word "smart" has two different meanings
  2. all the "Smart" projects reflect that Thailand is advancing socially
  3. people should help save energy by driving less and therefore consume less petrol
  4. the proposed energy-saving measure of the early closing of gas stations is ridiculous
17. How does the writer probably feel about Khun Apirak's policies?
1. neutral
  2. impressed
  3. indifferent
  4. disapproving
18. According to the text, despite the high gas price people continue using their cars because \_\_\_\_\_.
1. they are not satisfied with the available public transportation
  2. it is necessary for them to drive to work and to do other errands
  3. they do not see the importance of the early closing of gas stations
  4. they are used to driving and can afford the gas price no matter how high it is
19. The word "we" (line 11) refers to \_\_\_\_\_.
1. people who drive for the sake of driving
  2. people who support energy saving measures
  3. people who have to drive to work and for other reasons
  4. people who agree with the proposed early closing of gas stations

20. The writer might change his mind about this energy saving measure if there were

\_\_\_\_\_.

1. better bus stops, taxi stands, street signs and pedestrian crossing
2. promising development plans to ensure that Thailand is in the right direction
3. some kind of study that confirms the advantages of early closing of gas stations
4. a clear explanation and practical examples of how drivers can save more gasoline

### Part III

I bet many of you have seen Star Wars, Jurassic Park, Multiplicity, or many of the other movies that describe cloning. Most of what you see in these movies is false. What you don't know is that cloning could be dangerous, to the clone and to our society as a whole. It's unethical to have a human clone.

5 What about identity? Humans are guaranteed the right to their own personality. What would happen if we bypassed those rights by giving them someone else's genetic identity? True, personality is not limited to someone's genes, but the clone would share the physical appearance or genetic defects of the cloned individual.

10 Also, there is a large power struggle here. Cloning involves a degree of power and control over another person's physical identity and that violates their rights and degrades their unique individuality. The person doing the cloning would have more power than any parent would have.

15 Cloning would also deal with killing embryos. You might not have known, but Dolly, the sheep that was cloned in 1996, was one of over 200 sheep embryos and hers was the only embryo that survived. The rest died or were thrown away. Imagine if the failure rate was that high when we started to clone humans. More than 200 embryos, the start of 200 human beings, would die for the sake of just one embryo that would have the same DNA as someone else.

20 Cloning someone, at this present time, would be extremely dangerous to the birth mother and the clone. In studies done on cows, 4 out of 12 birth mothers died. There is also a very high abnormality rate for the clone. There is a very high failure rate, which is shown in the cloning of Dolly. Even if you had a few good embryos, miscarriages have been prominent in animal tests.

So, should we forge ahead in the world of cloning? I say no. The risks outweigh the \_\_\_\_\_. It's dangerous to the clone and to the birth mother. We would be killing innocent human lives in the process as well. It would also be a violation of a clone's right to its own genetic identity and individuality.

21. According to the writer, films like Star Wars, Jurassic Park, and Multiplicity \_\_\_\_\_.

1. provide a good description of cloning
2. provide an incorrect picture of cloning
3. present the idea that cloning is dangerous
4. raise controversial issues regarding cloning

22. The tone of the passage is \_\_\_\_\_.

1. optimistic
2. humorous
3. informative
4. argumentative

23. The word “bypassed” (line 6) is closest in meaning to \_\_\_\_\_.
1. ignored                      2. adjusted                      3. protected                      4. overplayed
24. According to the passage, the clone and the cloned share the following EXCEPT \_\_\_\_\_.
1. character                                      2. genetic defect  
3. genetic identity                              4. physical appearance
25. According to the third paragraph, \_\_\_\_\_.
1. power over one’s identity means violation of one’s rights  
2. the clone would struggle for more power over the cloned  
3. the majority of society are against cloning as it violates human rights  
4. individuality would be degraded if a person loses control over his/her identity
26. The phrase “the rest” (line 15) refers to \_\_\_\_\_.
1. Dolly                      2. sheep embryos                      3. Dolly’s embryos                      4. human embryos
27. From paragraph 4, we can infer that \_\_\_\_\_.
1. the failure rate will be high if there are too many embryos  
2. usually one embryo will survive during the process of cloning  
3. at least 200 embryos are needed to guarantee the success of cloning  
4. most embryos are killed due to insufficient food and inappropriate temperature
28. According to the passage, which statement is TRUE?
1. The birth mother has a very high abnormality rate.  
2. A very small number of clones will be in a perfect condition.  
3. Cloning is now a safer process as a result of scientific advance.  
4. The failure in cloning is mostly caused by insufficient research funds.
29. The word “prominent” (line 21) can be best replaced by \_\_\_\_\_.
1. taken place                      2. pointed out                      3. clearly seen                      4. experimented
30. Which of the following could complete the blank in line 24?
1. lives                      2. reasons                      3. benefits                      4. dangers

#### Part IV

Look around and you will be surprised at how much our everyday life depends on one thing: oil. From petrol to plastics, oil is an indispensable component of their production process. And here comes the worry: we all know that oil is a non-renewable resource. But now this situation is about to change.

- 5 Mix a pile of manure (basically agricultural waste) with some zinc oxide, angle a few giant mirrors towards the mixture, turn on the sun and steam the result. It may not sound appetizing, but Michael Epstein and his colleagues at the Weizmann Institute of Science, in Israel, think that this recipe represents a novel way of collecting solar energy to generate what many hope will be the fuel of the future—hydrogen.

Readers who remember their chemistry lessons may recall mixing zinc with hydrochloric acid in a test tube and standing by, lighted splint in hand, ready to ignite the hydrogen that is given off. Zinc reacts similarly with water—or, rather, steam—in this case stripping the oxygen from  $H_2O$ , and, once again, leaving the hydrogen. Industrializing that process, though, relies on finding a cheap way of turning the zinc oxide that results back into metallic zinc, so that the material can be recycled. And this, courtesy of the Weizmann Institute’s Solar Tower Laboratory, is what Dr. Epstein has done.

5

The tower’s 64 seven-meter-wide mirrors track down the sun and focus its rays into a beam with a power of up to 300 kilowatts. In Dr. Epstein’s experiment, the beam was used to heat a mixture of zinc oxide and charcoal. The charcoal (which is pure carbon) reacted with the oxygen in the zinc oxide, releasing the zinc. This instantly vaporized and was then extracted and condensed into powder, which can be used to extract hydrogen again.

10

At the moment, the cheapest way of making hydrogen is a process called reformation, which also uses steam, but reacts it with natural gas, a fossil fuel. Dr. Epstein thinks that if his process were scaled up, it would cost the same as reformation. It would also have the advantage over reformation that no fossil fuel need be involved, and so there is no net contribution of climate-changing carbon dioxide to the atmosphere.

15

In the meantime, the powdered zinc produced can also be employed in a different form of energy technology—zinc-air batteries. These are used to power certain sorts of electronic device. So, even if your car never runs on second-hand solar energy, one day your laptop might.

31. The most appropriate title for this passage would be \_\_\_\_\_.

1. The next step toward a hydrogen economy
2. Chemistry and the sun: the new use of solar energy
3. When the oil wells run dry—a countdown to doomsday
4. From basics to brilliance—breaking the frontier of science

32. The passage implies that hydrogen is \_\_\_\_\_.

1. very promising as a fuel
2. used to power electronic devices
3. the cheapest alternative source of energy
4. the most efficient form of energy known to mankind

33. The word “it” (line 16) refers to \_\_\_\_\_.

1. steam
2. hydrogen
3. fossil fuel
4. natural gas

34. The word “novel” (line 8) in this context is closest in meaning to \_\_\_\_\_.

1. strange
2. imitative
3. incredible
4. innovative

35. The tone of paragraph 2 seems to be \_\_\_\_\_.

1. formal
2. academic
3. surprising
4. light-hearted

36. From paragraph 3, we can infer that Dr. Epstein's process of making hydrogen \_\_\_\_\_.
1. is safe but complicated
  2. is expensive unless zinc is recycled
  3. may be costly if done on a large scale
  4. requires only a basic knowledge of chemistry lessons
37. Dr. Epstein's method and reformation are similar in that both \_\_\_\_\_.
1. use water or steam
  2. are relatively costly
  3. react with a fossil fuel
  4. are environmentally friendly
38. The following are the features of second-hand solar energy EXCEPT \_\_\_\_\_.
1. it can power vehicles
  2. it can be kept in a form of battery
  3. it is produced from powdered zinc
  4. it is the by-product of hydrogen extraction
39. It is likely that Dr. Epstein's experiment, if successful, could \_\_\_\_\_.
1. replace natural gas
  2. help ease the oil crisis
  3. store more solar energy
  4. produce little carbon dioxide
40. One can expect to find this passage in a \_\_\_\_\_.
1. business report
  2. tabloid newspaper
  3. scientific magazine
  4. company newsletter

#### Part V

As well as being blessed with sun-kissed paradise islands and pale, white sands, the Maldives, the tourist haven, is cursed with mounting evidence of an environmental catastrophe. To the naked eyes, the signs of climate change are almost imperceptible, but government scientists fear the sea level is rising up to 0.9 cm a year. Since 80% of its 1,200 islands are no more than one meter above sea level, within 100 years the Maldives could become uninhabitable. The country's 360,000 citizens would be forced to evacuate.

The Maldives' survival as a sovereign nation is truly at stake. No wonder it was the first country to sign up to the Kyoto Protocol, which sets targets for cuts in industrialized countries' greenhouse gas emissions.

No wonder that Male, the capital, is surrounded by a 3 meter-high wall, which took 14 years to construct at a cost of \$63 million. Unable to foot the bill themselves, the government happily accepted aid from Japan, which paid for 99% of the cost. But the wall offers protection for just one of the Maldives's 200 inhabited islands and then only against tidal surges rather than the rising sea level, the longer-term threat.

15 The country's fisherman no longer use the "Nakiy", a centuries-old weather guide based on stellar constellations which climate change has made all but irrelevant. The weather here is becoming more volatile and less predictable. The alignment of the stars no longer offers much guidance.

The Maldives government is encouraging forestation to prevent beach erosion and is backing a plan to clean litter and debris from the country's coral reefs—a natural barrier against tidal surges which changes to the fragile ecosystem have placed in peril.

20 In June 2004, the President of the Maldives wrote to the US President George Bush, in a rather optimistic attempt to persuade him to ratify the Kyoto Protocol. So far he is yet to receive a response. This minnow of a nation faces a mammoth task—to persuade members of the US government, whether officials in the Bush administration or lawmakers on Capitol Hill, to make long-term decisions from a global perspective, rather than short-term choices based on national self-interest. The Maldives can exert moral pressure and press its strong scientific case but not much more. So come here fast, before it disappears. This is a paradise  
25 faced with extinction.

41. The sentence "The Maldives's survival as a sovereign nation is truly at stake" (line 7) means \_\_\_\_.

1. The nation, having survived for so long, is now under threat
2. It costs a huge amount of budget to help the nation to continue to exist
3. Nations all over the world are concentrating on the Maldives' survival
4. The tourist spots and natural environment of the Maldives are of high value

42. Which of the following is **NOT** a consequence of the environmental catastrophe?

1. rising sea level
2. coral reef debris
3. the changing climate
4. ineffective use of the "Nakiy"

43. The Maldives has dealt with the environmental problem by \_\_\_\_\_.

1. cutting the greenhouse gas emissions
2. building coral reefs as walls against tides
3. growing trees along the country's coastlines
4. returning to the ancient method of weather forecast

44. Which of the following is **TRUE**?

1. The surging sea level is hardly noticeable by human's eyes.
2. Two hundred inhabited islands are surrounded by the protective walls.
3. The inhabited islands are submerged more than one meter below the sea level on average.
4. The Kyoto Protocol urges all nations to deal with their own environmental problems.

45. Which of the following has the same relationship as "minnow" and "mammoth" in the clause "This minnow of a nation faces a mammoth task" (line 24)?

1. tiny – gigantic
2. poor – luxurious
3. disappearing – existing
4. important – unimportant

46. The phrase "... to make long-term decisions from a global perspective" (line 25-26) refers to \_\_\_\_\_.  
1. giving a reasonable response                      2. signing up to the Kyoto Protocol  
3. neglecting household gas emissions            4. constructing concrete flood defenses
47. The President of the Maldives \_\_\_\_\_.  
1. exerted moral pressure against global leaders  
2. has not received any reply to his optimistic state letter  
3. urged international leaders to accept the Kyoto Protocol  
4. supported the Bush administration's decisions in terms of the Kyoto Protocol
48. The main idea of the passage is \_\_\_\_\_.  
1. the Maldives is suffering a deadly environmental problem  
2. tidal surges are considered a major threat to the Maldives' survival  
3. the wall surrounding the capital will not be able to protect the island from the long-term threat  
4. the President of the Maldives tried to persuade the US President to change the Kyoto Protocol
49. The passage implies that \_\_\_\_\_.  
1. this paradise may be faced with extinction if the US does not give it a hand  
2. the Maldives did not have enough budget for the tidal protective  
3. the US rejection of the Kyoto Protocol is based on its national self-interest  
4. officials in the Bush administration and the US lawmakers are to support the Kyoto Protocol
50. The tone of the author is \_\_\_\_\_.  
1. urgent                      2. relaxing                      3. doubtful                      4. optimistic

#### Part VI

As one of the most spectacular sites in the Middle East, Petra has long attracted travelers and explorers. During the 19<sup>th</sup> century, the site was visited and documented by several Europeans, after J.L. Burckhardt's initial visit. A synthesis of Petra was published by Libbey and Hoskins in 1905, presenting one of the first overviews in print. Archaeological excavations began in earnest at the turn of the century, with the  
5 earliest scientific expedition being published in *Arabia Petraea* in 1907, by A. Musil. In the 1920's, R.E. Brunnow and A. von Domaszewski surveyed the site and published an ambitious mapping project in their *Die Provincia Arabia*. This survey has since undergone many necessary revisions, the most recent of which was published by Judith McKenzie in 1990.

Modern excavations continue to increase our understanding of the site and correct the work of earlier  
10 scholars. In 1958, P.J. Parr and C.M. Bennett of the British School of Archaeology began an excavation of the city center which remains the most informative and scientific to date. Recently, the Petra/Jerash Project, undertaken by the Jordanian Department of Antiquities, the University of Jordan, the University of Utah, and Swiss archaeologists, have excavated a number of monuments at these two sites. Architectural remains now visible at Petra indicate a thriving city; however, despite almost 100 years of excavation, only one percent of  
15 the city has been investigated.

20 The Great Temple was first explored by Brunnow and von Domaszewski, but it was Bachmann, in his revision of the Petra city plan, who postulated the existence of a “Great Temple”, aligned with the Colonnade Street, lying on the hillside to the south. He speculated that the temple was approached through a monumental Propylaeum with a grand staircase leading into a colonnaded, terraced Lower Temenos, or sacred precinct. Given the promise of the Great Temple precinct and its importance in understanding Petra’s architectural and intercultural history, it is remarkable that it remained unexcavated until 1993 when the Brown University investigations began.

51. Petra is \_\_\_\_\_.
1. a survey project
  2. a book of expedition
  3. an archaeological site
  4. a temple in the Middle East
52. You can find information about the earliest description of Petra in the work of \_\_\_\_\_.
1. A. Musil
  2. J.L. Burckhardt
  3. Libbey and Hoskins
  4. R.E. Brunnow and A. von Domaszewski
53. The word “which” in “... the most recent of which was published ...” (line 8) refers to \_\_\_\_.
1. site
  2. revisions
  3. excavations
  4. Die Provincia Arabia
54. Which statement is **TRUE** according to the passage?
1. The city center was not excavated until the mid nineteenth century.
  2. Judith McKenzie wrote a book describing her survey in the nineteenth century.
  3. The more recent excavations, the more accurate the information we learn about Petra.
  4. Only one percent of the city is to be surveyed since archaeologists have undergone a lot of studies for almost 100 years.
55. The phrase “these two sites” (line 15) refers to \_\_\_\_\_.
1. Petra and Jerash
  2. a thriving city and the city center
  3. Great Temple and Colonnade Street
  4. the University of Jordan and the University of Utah
56. We can infer from the last paragraph that Bachmann based the physical plan of the Great Temple on \_\_\_\_\_.
1. the excavated staircase
  2. his recent study of Petra
  3. the remains of the temple
  4. his theoretical assumption
57. The excavation of the Great Temple is important because \_\_\_\_\_.
1. it confirms that Bachmann’s theory is correct
  2. the Great Temple was the heart of the ancient city
  3. it provides an insight into Petra’s architecture and culture
  4. the Great Temple directed visitors to another important structure—Propylaeum



66. Some experts are so convincing that colors have a strong effect on us that they believe

1 2 3

colors can be used to heal.

4

67. Young professionals, in particular, tend to be very busy and do not have much time to

1 2 3

sit at a restaurant to eat lunch.

4

68. It seems likely that in the future the practice of medicine will consist with a combination

1 2

of approaches drawn from a variety of cultures.

3 4

69. Despite of a U.S. Supreme Court decision in June to uphold the ban on medical

1 2 3

marijuana, drug companies are not discouraged.

4

70. To generate donations for scholarship that send need kids to college, Bill Jones relies

1 2 3

on his ability to motivate others.

4

71. CIALIS can cause your blood pressure drop suddenly to an unsafe level if it is taken with

1 2 3

certain other medicines.

4

72. Using a camouflage device, Fabien Cousteau believes, allow scientists to capture

1 2 3

animal behavior in a purer way.

4

73. This book discusses how having a healthy lifestyle and avoiding stress will less your

1 2 3

chance of having a stroke.

4

74. Their objective is to explore, questioning and supplement the story of Jim Thompson  
1 2 3  
and his love of Thailand's cultural heritage.  
4
75. Bananas are different from most other cultivated plants in that almost all of the varieties  
1 2 3  
lack of seeds.  
4
76. Ford Motors will conduct an environmental impact assessment that will be detailed the  
1 2  
impact of the products and manufacturing facilities on greenhouse gas emissions.  
3 4
77. The Revenue Department uses computers to check tax return computations, to  
1 2  
determine the reasonableness of deductions, and for verifying the accuracy of reported  
3 4  
income.
78. Higher diesel prices have done which even the tsunami failed to do – forcing local fish  
1 2 3  
sellers to raise their prices.  
4
79. Join the movement towards organizational excellent, and see the competitiveness of  
1 2 3  
your organization being greatly and rapidly enhanced.  
4
80. In the letter signed by the entire staff, it was asked when would they receive the  
1 2 3  
promised pay increase.  
4

**Writing (20 points)**

**It is important for travelers and students to understand the cultures they come into contact with. What are the main advantages of doing so? What do you think is the main disadvantage of not doing so?**

Give reasons for your answer and include any relevant examples from your own knowledge or experience.

Write at least 250 words.