

國立臺北科技大學九十七學年度碩士班招生考試

系所組別：2330 資訊工程系碩士班丙組

第一節 英文 試題

填 准 考 證 號 碼

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第一頁 共四頁

注意事項：

1. 本試題第 1-45 為選擇題，每題 2 分；第 46-47 為翻譯題，每題 5 分，配分共 100 分。
2. 請標明大題、子題編號作答，不必抄題。
3. 全部答案均須在答案卷之答案欄內作答，否則不予計分。

一、Vocabulary and grammar (20%)

For questions 1-10, decide which answer (A), (B), (C), or (D) best fits each space. Then on your answer sheet, write the letter you have chosen beside the number of the question.

1. There is _____ gasoline in the car to make the trip but not to return.
(A) efficient (B) sufficient (C) eliminate (D) subordinate
2. The government proposed that each city-dweller _____ with the new restrictions.
(A) comply (B) complies (C) to comply (D) is complied
3. The electrical system eases the demands on the gasoline engine, _____ fuel efficiency.
(A) improved great (B) improves greatly (C) great improving (D) greatly improving
4. The term "success" may mean ending your life in a higher and more _____ position than you began it.
(A) present (B) preserve (C) proficient (D) prosperous
5. When the body lacks the correct amount of B6 and B12, pernicious anemia and poor metabolism can _____.
(A) result (B) be resulted (C) result in (D) be resulted in
6. Voters in the United States, _____ experienced strong female leaders at the national level, may never elect a woman president.
(A) having no (B) not having (C) do not have (D) have not being
7. We spend the night _____ between two different types of sleep, each with different brain mechanisms and different purposes.
(A) allocating (B) attributing (C) alternating (D) accommodating

8. Anthropological museums have _____ realistic displays that a visitor can gain insight into the life styles of ancient people.
(A) much (B) such (C) all of (D) such kind
9. The sun derives its energy from a process of fusion _____ hydrogen atoms are converted into helium atoms under extreme heat and pressure.
(A) what (B) which (C) in which (D) of that
10. It is one of the amazing facts of science that all living organisms, from simple plants and animals to human beings, _____ cells, and that these cells are remarkably similar in structure.
(A) compose of (B) are made of (C) make up for (D) are consisted with

二、Organization and grammar (40%)

For questions 11-30, decide which answer (A), (B), (C), or (D) best fits each space. Then on your answer sheet, write the letter you have chosen beside the number of the question.

Questions 11-20

Though humans and chimpanzees do not seem very much alike at first glance, they _____ 11 _____ as primates and thus share a number of remarkably similar characteristics. First, the skeletons of humans and chimpanzees are similar; both species possess five fingers on each hand, including a movable thumb _____ 12 _____ the hand capable of grasping objects. _____ 13 _____ chimpanzees prefer traveling on all fours, they are able to walk upright like humans. Female chimpanzees have fewer young than other mammals, and humans do, too. The young of the two species are born after a gestation period of about nine months and then stay with their mothers for several years, a period which permits _____ 14 _____ what they need to know in order to survive. However, _____ 15 _____ the similarities between the two species, perhaps the most notable is their intelligence. _____ 16 _____ humans enjoy discovering new things, so chimpanzees are curious about what they do not know. Even more important here is the question of language ability. While the sounds made by chimpanzees _____ 17 _____ those made by humans, many experts believe that there is a real similarity in the way both species can use abstract symbols to communicate meanings. Humans communicate with each other through words; _____ 18 _____, it is believed that chimpanzees can be taught to communicate by means of signs. Moreover, chimps _____ 19 _____ the ability to learn a rather large vocabulary of signs and then to put these signs together in entirely new combinations—an ability _____ 20 _____ what humans do with words. In other words, humans can be creative in the way they communicate, and so can chimpanzees.

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| 11. (A) both classify | (C) are both classified |
| (B) both classified | (D) are both classifying |
| 12. (A) made | (C) that makes |
| (B) makes | (D) that is made by |
| 13. (A) Unless | (C) Because |
| (B) Although | (D) Whenever |
| 14. (A) they learn | (C) they learning |
| (B) them learn | (D) them to learn |
| 15. (A) of all | (C) from |
| (B) without | (D) in spite of |
| 16. (A) For | (C) Just as |
| (B) Since | (D) As long as |
| 17. (A) really not like | (C) really do not like |
| (B) not really like | (D) are not really like |
| 18. (A) but | (C) whereas |
| (B) likewise | (D) otherwise |
| 19. (A) seem possess | (C) seem possessing |
| (B) seem to possess | (D) seem to be possessed by |
| 20. (A) closely resembles | (C) closely resembling |
| (B) resembling close to | (D) resembled closely to |

Questions 21-30

Which falls faster, a blade of grass or a stone? Anyone can see that a stone falls faster. That is what the ancient Greeks believed. 21 everyday experience, Aristotle determined that heavy objects fall faster than light objects and 22 objects fall with a speed proportional to their weight.

Aristotle also studied horizontal motion. He observed that whenever he pushed a rock or other object, it always rolled for a while and then came to rest. He 23 that the natural state of an object is to be at rest and a force is necessary to keep an object in motion. Aristotle's hypotheses were accepted for two thousand years 24 they were consistent with logic and informal observation.

It was not until the early 1600s that these 25 beliefs were challenged. Galileo was not content to accept ideas without verifying them with experiments. He dropped various weights from a height and recorded the results. Disproving Aristotle's hypothesis, he determined that all bodies fall at equal rates, 26 the air resistance is discounted. A

blade of grass will fall more slowly than a stone only because it meets with more resistance from the air.

27, Galileo disproved Aristotle's hypothesis about horizontal motion. He demonstrated that a body pushed on a smooth surface could go much further than one pushed on a rough surface. When a lubricant such as oil was used, almost no force was required to keep the object in motion. He concluded that if an object does not meet with resistance, it will continue to move at a constant speed 28 no force is applied.

Half a century later, Newton extended Galileo's ideas and formulated a theory 29 a body at rest will remain at rest and a body in motion will remain in motion unless some outside force acts on it. This theory is so 30 that it is referred to as Newton's first law of motion.

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| 21. (A) As for | (C) As such |
| (B) According | (D) Based on |
| 22. (A) that | (C) for |
| (B) also | (D) not |
| 23. (A) hypothesized | (C) was hypothesizing |
| (B) has hypothesized | (D) had been hypothesized |
| 24. (A) that | (C) because |
| (B) after | (D) although |
| 25. (A) established-long | (C) long-established |
| (B) establishing-long | (D) long-establishing |
| 26. (A) if | (C) due to |
| (B) despite | (D) no matter |
| 27. (A) In return | (C) In addition |
| (B) By contrast | (D) In other words |
| 28. (A) before | (C) therefore |
| (B) whether | (D) even though |
| 29. (A) for | (C) called |
| (B) that | (D) that is |
| 30. (A) universal accepting | (C) universal accepted |
| (B) universally accepting | (D) universally accepted |

三、Sentence Comprehension (10%)

In this session, you will read several sentences. Choose the answer (A), (B), (C), or (D) that best matches the meaning of each of these sentences. Then on your answer sheet, write the letter you have chosen beside the number of the question.

31. Ions are formed when an acid is dissolved in water.
 (A) Ions cause an acid to be dissolved in water.
 (B) When in water, ions produce a dissolved acid.
 (C) Dissolving an acid in water causes ions to be generated.
 (D) Dissolved acid in water follows from the formation of ions.
32. The concept of heat affecting color is exemplified by iron.
 (A) An example of the color is iron affected by heat.
 (B) Iron illustrates the concept of color affected by heat.
 (C) An example of iron is its color being affected by heat.
 (D) Iron is illustrated by the concept of heat affecting color.
33. Citizens could never have had the horror of Hiroshima if the atom had not been split.
 (A) The horror of citizens led to the split atom of Hiroshima.
 (B) Citizens could have the horror of Hiroshima unless the atom split.
 (C) The split atom could be attributed to citizens' horror of Hiroshima.
 (D) Citizens experienced the horror of Hiroshima because the atom split.
34. After lengthy investigation and discussion, the final choices are made for each discipline.
 (A) Each discipline makes the final choices of lengthy investigation and discussion.
 (B) Lengthy investigation and discussion precede the final choices for each discipline.
 (C) Having the final choices, each discipline makes lengthy investigation and discussion.
 (D) The final choices for each discipline are made until after lengthy investigation and discussion.
35. In contrast to the Belgium, which has a large population, Ireland is far from densely populated.
 (A) Ireland has a much smaller population than Belgium.
 (B) Belgium has a lower density than Ireland in regard to population.
 (C) Ireland is located in an area far from any major population center of Belgium.
 (D) Ireland and Belgium are similar in that both are far more densely populated than the other countries.

四、Reading Comprehension (20%)

In this session, you will read several passages. Each one is followed by some questions about it. Choose the best answer (A), (B), (C), or (D) according to the given passage. Then on your answer sheet, write the letter you have chosen beside the number of the question.

Questions 36-39

Muscles produce heat when the body is in motion, but when the body is at rest, very little heat is generated except by the metabolic activity of the internal organ. In effect, the internal organs are the source of most body heat. The temperature of an organ such as the liver is much higher than the overall body temperature. The blood carried heat away from the internal organs to lungs and skin. Heat is then released by the lungs through respiration and by the skin through contact with the air.

36. According to the passage above, what happens when the body is at rest?
 (A) The metabolic rate increases.
 (B) Internal organs provide most body heat.
 (C) The liver works harder to provide body heat.
 (D) Muscles require lower temperature than usual.
37. According to the passage above, what does the body do with extra heat?
 (A) It cools heat in the liver.
 (B) It stores heat in the muscles.
 (C) It returns heat to its internal sources.
 (D) It releases heat through lungs and skin.
38. According to the passage above, heat is transferred from one part of the body to another through
 (A) blood circulation.
 (B) insulation of the skin.
 (C) moisture evaporation.
 (D) respiration in the lungs.
39. In the last sentence, the word "respiration" relates to the process that takes place to
 (A) turn liquid into vapor.
 (B) heat up air in the lungs.
 (C) take air in and out of the lungs.
 (D) detect the overall body temperature.

Questions 40-42

For several years, Americans have enjoyed teleshopping—watching cable TV and ordering things by phone. Now teleshopping is starting in Europe. In a number of European countries, people can turn on their TVs to cable stations and shop for clothes, jewelry, wine, tools, toys, kitchen equipment, and many other things.

Teleshopping is becoming popular in Sweden, for example. The biggest Swedish company offers merchandise in 15 European countries, and in one year it had sales of \$100 million. In France there are two teleshopping channels, and the French spend about \$20 million a year to buy things through those channels.

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In Germany, until recently teleshopping was only possible on one channel for one hour per day. Then the government decided to allow more teleshopping. Other channels can open for telebusiness, including the largest American teleshopping company and a 24-hour teleshopping company. German businesses are hoping that these new teleshopping possibilities will help them increase their sales.

Some people like teleshopping because it allows them to do their shopping without leaving their homes. With all the problems of traffic in the cities, this is an important factor. However, other Europeans do not like this new way of shopping. A German journalist, for example, called teleshopping "junk on the air." In general, many Europeans are concerned about the quality of the things for sale on TV. Good quality is important to them, and they believe they cannot be sure about the quality of the things on TV.

This demand for high quality means that European teleshopping companies will have to be different from the American companies. They will have to be more careful about the quality of the things they sell. They will also have to work harder to sell things that the customers cannot touch or see in person.

40. According to the passage above, teleshopping is
- (A) growing in Europe.
 - (B) not popular in Europe.
 - (C) considered junk in a number of European countries.
 - (D) more possible in America than in European countries.
41. According to the passage above, why do Europeans like teleshopping?
- (A) Teleshopping is more popular.
 - (B) Teleshopping is more time-saving.
 - (C) Teleshopping helps to increase sales.
 - (D) Teleshopping offers things that cannot be touched or seen in person.
42. According to the passage above, which of the following statements is true?
- (A) Things sold on TV should be regarded as poor quality.
 - (B) American teleshopping companies are most popular in Europe.
 - (C) In Germany, the 24-hour teleshopping company did not open until recently.
 - (D) Some Europeans do not like teleshopping, because they prefer shopping at home.

Questions 43-45

To find out what the weather is going to be, most people go straight to the radio or television to get an expert weather forecast. But if you know what to look for, you can use your own senses to make weather predictions.

There are many signs that can help you. For example, in fair weather the air pressure is generally high, the air is still and often full of dust, and faraway objects may look hazy. But when a storm is brewing, the pressure drops and you are often able to see things more clearly. Sailors took note of this long ago and came up with a saying: "The farther the sight, the nearer the rain."

Your sense of smell can also help you detect weather changes. Just before it rains, odors become stronger. This is because odors are repressed in a high-pressure center. When a bad weather low moves in, air pressure lessens and odors are released.

You can also hear an approaching storm. Sounds bounce off heavy storm clouds and return to earth with increased force. An old saying describes it this way: "Sound traveling far and wide, a stormy day will betide."

And don't scoff if your grandmother says she can feel a storm coming. It is commonly known that many people feel pains in their bones when the humidity rises, the pressure drops, and bad weather is on the way.

43. What is the main idea of the passage above?
- (A) Seeing approaching storms is possible.
 - (B) You can use your senses to detect weather changes.
 - (C) Old people often have keener senses than young people.
 - (D) With a little training, you can use your senses more effectively.
44. According to the passage above, which of the following statements is true?
- (A) As a storm is beginning to form, the air pressure rises.
 - (B) When a storm approaches, sounds can hardly be heard.
 - (C) When bad weather is approaching, smells become stronger.
 - (D) When a storm approaches, faraway objects look unclear because air pressure is dropping.
45. What is implied in the last paragraph of the passage?
- (A) The idea of feeling a coming storm is absurd.
 - (B) It is unlikely that people feel aches when a storm is coming.
 - (C) Older people have a broad knowledge about weather patterns.
 - (D) It is true that some people can feel the coming weather changes.

五 · Translation (10%)

On your answer sheet, write the numbers of the following passages and then translate them into English.

46. 爲了減少燃料的用量，現代汽車的設計已產生重大變革。
47. 由於重力的差異，許多在地球上難以進行的實驗在月球上卻能順利完成。