

102 年度英文科學科能力測驗試卷

總 分

_____年 _____班 學號_____ 姓名_____

第壹部分：單選題（占 72 分）

一、詞彙題（占 15 分）

說明：第 1 題至第 15 題，每題有 4 個選項，其中只有一個是正確或最適當的選項，請畫記在答案卡之「選擇題答案區」。各題答對者，得 1 分；答錯、未作答或畫記多於一個選項者，該題以零分計算。

◎選項後的數字為該詞彙的難度（參考大考中心的詞彙表）

- () 1. It rained so hard yesterday that the baseball game had to be _____ until next Saturday.
(A) surrendered 4 (B) postponed 3 (C) abandoned 4 (D) opposed 4
- () 2. As more people rely on the Internet for information, it has _____ newspapers as the most important source of news.
(A) distributed 4 (B) subtracted 2 (C) replaced 3 (D) transferred 4
- () 3. Having saved enough money, Joy _____ two trips for this summer vacation, one to France and the other to Australia.
(A) booked 1 (B) observed 3 (C) enclosed 4 (D) deposited 3
- () 4. Since I do not fully understand your proposal, I am not in the position to make any _____ on it.
(A) difference 2 (B) solution 4 (C) demand 4 (D) comment 4
- () 5. Betty was _____ to accept her friend's suggestion because she thought she could come up with a better idea herself.
(A) tolerable 4 (B) sensitive 3 (C) reluctant 4 (D) modest 4
- () 6. The bank tries its best to attract more customers. Its staff members are always available to provide _____ service.
(A) singular 4 (B) prompt 4 (C) expensive 2 (D) probable 3
- () 7. John's part-time experience at the cafeteria is good _____ for running his own restaurant.
(A) preparation 3 (B) recognition 4 (C) formation 4 (D) calculation 4
- () 8. Women's fashions are _____ changing: One season they may favor pantsuits, but the next season they may prefer miniskirts.
(A) lately 4 (B) shortly 3 (C) relatively 4 (D) constantly 3
- () 9. Standing on the seashore, we saw a _____ of seagulls flying over the ocean before they glided down and settled on the water.
(A) pack 2 (B) flock 3 (C) herd 4 (D) school 1

- () 10. The book is not only informative but also _____, making me laugh and feel relaxed while reading it.
 (A) understanding 1 (B) infecting 4 (C) entertaining 4 (D) annoying 4
- () 11. After working in front of my computer for the entire day, my neck and shoulders got so _____ that I couldn't even turn my head.
 (A) dense 4 (B) harsh 4 (C) stiff 3 (D) concrete 4
- () 12. Getting a flu shot before the start of flu season gives our body a chance to build up protection against the _____ that could make us sick.
 (A) poison 2 (B) misery 3 (C) leak 3 (D) virus 4
- () 13. The kingdom began to _____ after the death of its ruler, and was soon taken over by a neighboring country.
 (A) collapse 4 (B) dismiss 4 (C) rebel 4 (D) withdraw 4
- () 14. Though Kevin failed in last year's singing contest, he did not feel _____. This year he practiced day and night and finally won first place in the competition.
 (A) relieved 4 (B) suspected 3 (C) discounted 3 (D) frustrated 3
- () 15. Emma and Joe are looking for a live-in babysitter for their three-year-old twins, _____ one who knows how to cook.
 (A) initially 4 (B) apparently 3 (C) preferably 4 (D) considerably 3

二、綜合測驗（占 15 分）

說明：第 16 題至第 30 題，每題一個空格，請依文意選出最適當的一個選項，請畫記在答案卡之「選擇題答案區」。各題答對者，得 1 分；答錯、未作答或畫記多於一個選項者，該題以零分計算。

第 16 至 20 題為題組

An area code is a section of a telephone number which generally represents the geographical area that the phone receiving the call is based in. It is the two or three digits just before the local number. If the number 16 is in the same area as the number making the call, an area code usually doesn't need to be dialed. The local number, 17, must always be dialed in its entirety.

The area code was introduced in the United States in 1947. It was created 18 the format of XYX, with X being any number between 2-9 and Y being either 1 or 0. Cities and areas with higher populations would have a smaller first and third digit, and 1 as the center digit. New York, being the largest city in the United States, was 19 the 212 area code, followed by Los Angeles at 213.

In countries other than the United States and Canada, the area code generally determines the 20 of a call. Calls within an area code and often a small group of neighboring area codes are normally charged at a lower rate than outside the area code.

- () 16. (A) calling (B) being called (C) having called (D) has been calling
 () 17. (A) in fact (B) to illustrate (C) at the same time (D) on the other hand
 () 18. (A) for (B) as (C) by (D) in
 () 19. (A) reserved (B) assigned (C) represented (D) assembled

- () 20. (A) cost (B) format (C) quality (D) distance

第 21 至 25 題為題組

For coin collectors who invest money in coins, the value of a coin is determined by various factors. First, scarcity is a major determinant. 21 a coin is, the more it is worth. Note, however, that rarity has little to do with the 22 of a coin. Many thousand-year-old coins often sell for no more than a few dollars because there are a lot of them around, 23 a 1913 Liberty Head Nickel may sell for over one million US dollars because there are only five in existence. Furthermore, the demand for a particular coin will also 24 influence coin values. Some coins may command higher prices because they are more popular with collectors. For example, a 1798 dime is much rarer than a 1916 dime, but the 25 sells for significantly more, simply because many more people collect early 20th century dimes than dimes from the 1700s.

- () 21. (A) Rare as (B) The rare (C) Rarest (D) The rarer
() 22. (A) age (B) shape (C) size (D) weight
() 23. (A) since (B) while (C) whether (D) if
() 24. (A) merely (B) hardly (C) greatly (D) roughly
() 25. (A) older (B) better (C) latter (D) bigger

第 26 至 30 題為題組

French psychologist Alfred Binet (1859-1911) took a different approach from most other psychologists of his day: He was interested in the workings of the 26 mind rather than the nature of mental illness. He wanted to find a way to measure the ability to think and reason, apart from education in any particular field. In 1905 he developed a test in which he 27 children do tasks such as follow commands, copy patterns, name objects, and put things in order or arrange them properly. He later created a standard of measuring children's intelligence 28 the data he had collected from the French children he studied. If 70 percent of 8-year-olds could pass a particular test, then 29 on the test represented an 8-year-old's level of intelligence. From Binet's work, the phrase "intelligence quotient" ("IQ") entered the English vocabulary. The IQ is the ratio of "mental age" to chronological age times 100, with 100 30 the average. So, an 8-year-old who passes the 10-year-old's test would have an IQ of 10/8 times 100, or 125.

- () 26. (A) contrary (B) normal (C) detective (D) mutual
() 27. (A) had (B) kept (C) wanted (D) asked
() 28. (A) composed of (B) based on (C) resulting in (D) fighting against
() 29. (A) success (B) objection (C) agreement (D) discovery
() 30. (A) is (B) are (C) been (D) being

三、文意選填（占 10 分）

說明：第 31 題至第 40 題，每題一個空格，請依文意在文章後所提供的(A)到(J)選項中分別選出最適當者，並將其英文字母代號畫記在答案卡之「選擇題答案區」。各題答對者，得 1 分；答錯、未作答或畫記多於一個選項者，該題以零分計算。

Often called “rainforests of the sea,” coral reefs provide a home for 25% of all species in the ocean. They are stony structures full of dark hideaways where fish and sea animals can lay their eggs and 31 from predators. Without these underwater “apartment houses,” there would be fewer fish in the ocean. Some species might even become 32 or disappear completely.

There are thousands of reefs in the world; 33, however, they are now in serious danger. More than one-third are in such bad shape that they could die within ten years. Many might not even 34 that long! Scientists are working hard to find out what leads to this destruction. There are still a lot of questions unanswered, but three main causes have been 35.

The first cause is pollution on land. The pollutants run with rainwater into rivers and streams, which 36 the poisons into the ocean. Chemicals from the poisons kill reefs or make them weak, so they have less 37 to diseases.

Global warming is another reason. Higher ocean temperatures kill the important food source for the coral—the algae, the tiny greenish-gold water plants that live on coral. When the algae die, the coral loses its color and it also dies 38. This process, known as “coral bleaching,” has happened more and more frequently in recent years.

The last factor contributing to the 39 of coral reefs is people. People sometimes crash into reefs with their boats or drop anchors on them, breaking off large chunks of coral. Divers who walk on reefs can also do serious damage. Moreover, some people even break coral off to collect for 40 since it is so colorful and pretty.

How can we help the reefs? We need to learn more about them and work together to stop the activities that may threaten their existence.

- | | | | | |
|----------------|-------------------|---------------|----------------|-----------|
| (A) resistance | (B) identified | (C) last | (D) escape | (E) sadly |
| (F) eventually | (G) disappearance | (H) souvenirs | (I) endangered | (J) carry |

四、閱讀測驗（占 32 分）

說明：第 41 題至第 56 題，每題請分別根據各篇文章之文意選出最適當的一個選項，請畫記在答案卡之「選擇題答案區」。各題答對者，得 2 分；答錯、未作答或畫記多於一個選項者，該題以零分計算。

第 41 至 44 題為題組

The Swiss army knife is a popular device that is recognized all over the world. In Switzerland, there is a saying that every good Swiss citizen has one in his or her pocket. But the knife had humble beginnings.

In the late nineteenth century, the Swiss army issued its soldiers a gun that required a special screwdriver to dismantle and clean it. At the same time, canned food was becoming common in the army. Swiss generals decided to issue each soldier a standard knife to serve both as a screwdriver and a can opener.

It was a lifesaver for Swiss knife makers, who were struggling to compete with cheaper German imports. In 1884, Carl Elsener, head of the Swiss knife manufacturer Victorinox, seized that opportunity with both hands, and designed a soldier's knife that the army loved. It was a simple knife with one big blade, a can opener, and a screwdriver.

A few years after the soldier's knife was issued, the "Schweizer Offizier Messer," or Swiss Officer's Knife, came on the market. Interestingly, the Officer's Knife was never given to those serving in the army. The Swiss military purchasers considered the new model with a corkscrew for opening wine not "essential for survival," so officers had to buy this new model by themselves. But its special multi-functional design later launched the knife as a global brand. After the Second World War, a great number of American soldiers were stationed in Europe. And as they could buy the Swiss army knife at shops on military bases, they bought huge quantities of them. However, it seems that "Schweizer Offizier Messer" was too difficult for them to say, so they just called it the Swiss army knife, and that is the name it is now known by all over the world.

- () 41. What is the main purpose of the passage?
- (A) To explain the origin of the Swiss army knife.
 - (B) To introduce the functions of the Swiss army knife.
 - (C) To emphasize the importance of the Swiss army knife.
 - (D) To tell a story about the designer of the Swiss army knife.
- () 42. What does "**It**" in the third paragraph refer to?
- (A) The Swiss army needed a knife for every soldier.
 - (B) Every good Swiss citizen had a knife in his pocket.
 - (C) Swiss knives were competing with imported knives.
 - (D) Canned food was becoming popular in the Swiss army.
- () 43. Why didn't the Swiss army purchase the Swiss Officer's Knife?
- (A) The design of the knife was too simple.
 - (B) The knife was sold out to American soldiers.
 - (C) The army had no budget to make the purchase.
 - (D) The new design was not considered necessary for officers to own.
- () 44. Who gave the name "the Swiss army knife" to the knife discussed in the passage?
- (A) Carl Elsener.
 - (B) Swiss generals.
 - (C) American soldiers.
 - (D) German businessmen.

第 45 至 48 題為題組

Space is where our future is—trips to the Moon, Mars and beyond. Most people would think that aside from comets and stars there is little else out there. But, since our space journey started we have left

so much trash there that scientists are now concerned that if we don't clean it up, we may all be in mortal danger.

The first piece of space junk was created in 1964, when the American satellite Vanguard I stopped operating and lost its connection with the ground center. However, since it kept orbiting around the Earth without any consequences, scientists became increasingly comfortable abandoning things that no longer served any useful purpose in space.

It is estimated that there are currently over 500,000 pieces of man-made trash orbiting the Earth at speeds of up to 17,500 miles per hour. The junk varies from tiny pieces of paint chipped off rockets to cameras, huge fuel tanks, and even odd items like the million-dollar tool kit that astronaut Heidemarie Stefanyshyn-Piper lost during a spacewalk.

The major problem with the space trash is that it may hit working satellites and damage traveling spacecraft. Moreover, pieces of junk may collide with each other and break into fragments which fall back to the Earth. To avoid this, scientists have devised several ways for clearing the sky. Ground stations have been built to monitor larger pieces of space trash to prevent them from crashing into working satellites or space shuttles. Future plans include a cooperative effort among many nations to stop littering in space and to clean up the trash already there.

- () 45. What was the first piece of man-made space trash?
- (A) A camera.
 - (B) A tool kit.
 - (C) A fuel tank.
 - (D) A broken satellite.
- () 46. Why were scientists **NOT** concerned about space trash in the beginning?
- (A) It no longer served any useful purpose.
 - (B) It was millions of miles away from the Earth.
 - (C) It did not cause any problems.
 - (D) It was regarded as similar to comets and stars.
- () 47. Which of the following statements is true about space junk?
- (A) It is huge, heavy machines.
 - (B) It never changes position.
 - (C) It floats slowly around the Earth.
 - (D) It may cause problems for space shuttles.
- () 48. What has been done about the space trash problem?
- (A) Scientists have cleaned up most of the trash.
 - (B) Large pieces of space trash are being closely watched.
 - (C) Many nations have worked together to stop polluting space.
 - (D) Ground stations are built to help store the trash properly in space.

第 49 至 52 題為題組

An alcohol breath test (ABT) is often used by the police to find out whether a person is drunk while driving. In the United States, the legal blood alcohol limit is 0.08% for people aged 21 years or older, while people under 21 are not allowed to drive a car with any level of alcohol in their body. A “positive” test result, a result over the legal limit, allows the police to arrest the driver. However, many people who tested positive on the test have claimed that they only drank a “non-alcoholic” energy drink. Can one of these energy drinks really cause someone to test positive on an ABT? Researchers in Missouri set up an experiment to find out.

First, the amount of alcohol in 27 different popular energy drinks was measured. All but one had an alcohol level greater than 0.005%. In nine of the 27 drinks, the alcohol level was at least 0.096%. The scientists then investigated the possibility that these small levels of alcohol could be detected by an ABT. They asked test subjects to drink a full can or bottle of an energy drink and then gave each subject an ABT one minute and 15 minutes after the drink was finished.

For 11 of the 27 energy drinks, the ABT did detect the presence of alcohol if the test was given within one minute after the drink was taken. However, alcohol could not be detected for any of the drinks if the test was given 15 minutes after the drink was consumed. This shows that when the test is taken plays a crucial role in the test result. The sooner the test is conducted after the consumption of these drinks, the more likely a positive alcohol reading will be obtained.

- () 49. For a person who just turned 20, what is the legal alcohol level allowed while driving in the US?
- (A) 0.000%.
 - (B) 0.005%.
 - (C) 0.080%.
 - (D) 0.096%.
- () 50. What is the purpose of the Missouri experiment?
- (A) To introduce a new method of calculating blood alcohol levels.
 - (B) To discover the relation between energy drinks and ABT test results.
 - (C) To warn about the dangers of drinking energy drinks mixed with alcohol.
 - (D) To challenge the current legal alcohol limit for drivers in the United States.
- () 51. What were the participants of the experiment asked to do after they finished their energy drink?
- (A) To line up in the laboratory.
 - (B) To recall the drink brands.
 - (C) To take an alcohol breath test.
 - (D) To check their breath for freshness.
- () 52. What is the most important factor that affects the ABT test result for energy drink consumers?
- (A) The age of the person who takes the test.
 - (B) The place where the test is given.
 - (C) The equipment that the test uses.
 - (D) The time when the test is taken.

第 53 至 56 題為題組

The majority of Indian women wear a red dot between their eyebrows. While it is generally taken as an indicator of their marital status, the practice is primarily related to the Hindu religion. The dot goes by different names in different Hindi dialects, and “bindi” is the one that is most commonly known. Traditionally, the dot carries no gender restriction: Men as well as women wear it. However, the tradition of men wearing it has faded in recent times, so nowadays we see a lot more women than men wearing one.

The position of the bindi is standard: center of the forehead, close to the eyebrows. It represents a third, or inner eye. Hindu tradition holds that all people have three eyes: The two outer ones are used for seeing the outside world, and the third one is there to focus inward toward God. As such, the dot signifies piety and serves as a constant reminder to keep God in the front of a believer’s thoughts.

Red is the traditional color of the dot. It is said that in ancient times a man would place a drop of blood between his wife’s eyes to seal their marriage. According to Hindu beliefs, the color red is believed to bring good fortune to the married couple. Today, people go with different colors depending upon their preferences. Women often wear dots that match the color of their clothes. Decorative or sticker bindis come in all sizes, colors and variations, and can be worn by young and old, married and unmarried people alike. Wearing a bindi has become more of a fashion statement than a religious custom.

- () 53. Why did people in India start wearing a red dot on their forehead?
- (A) To indicate their social rank.
 - (B) To show their religious belief.
 - (C) To display their financial status.
 - (D) To highlight their family background.
- () 54. What is the significance of the third eye in Hindu tradition?
- (A) To stay in harmony with nature.
 - (B) To observe the outside world more clearly.
 - (C) To pay respect to God.
 - (D) To see things with a subjective view.
- () 55. Why was red chosen as the original color of the bindi?
- (A) The red dot represented the blood of God.
 - (B) Red stood for a wife’s love for her husband.
 - (C) The word “bindi” means “red” in some Hindi dialects.
 - (D) Red was supposed to bring blessings to a married couple.
- () 56. Which of the following statements is true about the practice of wearing a bindi today?
- (A) Bindis are worn anywhere on the face now.
 - (B) Bindis are now used as a decorative item.
 - (C) Most Indian women do not like to wear bindis anymore.
 - (D) Wearing a bindi has become more popular among Indian men.

第貳部分：非選擇題（占 28 分）

一、中譯英（占 8 分）

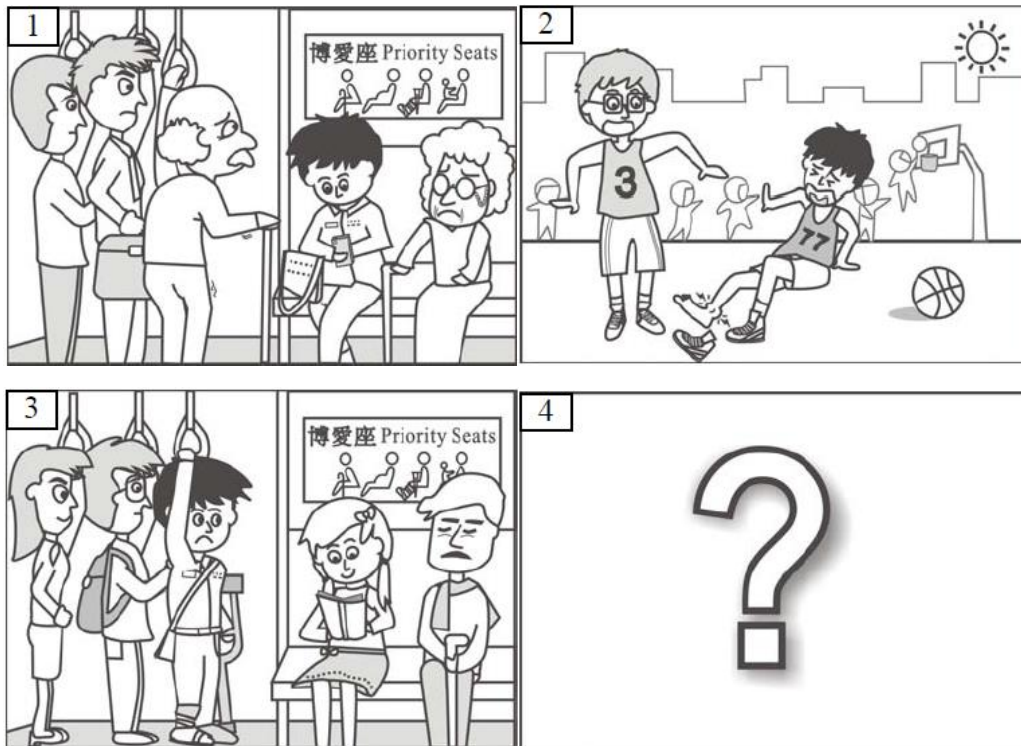
說明：1. 請將以下中文句子譯成正確、通順、達意的英文，並將答案寫在「答案卷」上。
2. 請依序作答，並標明題號。每題 4 分，共 8 分。

1. 都會地區的高房價對社會產生了嚴重的影響。
2. 政府正推出新的政策，以滿足人們的住房需求。

二、英文作文（占 20 分）

說明：1. 依提示在「答案卷」上寫一篇英文作文。
2. 文長至少 120 個單詞（words）。

提示：請仔細觀察以下三幅連環圖片的內容，並想像第四幅圖片可能的發展，寫出一個涵蓋連環圖片內容並有完整結局的故事。



範文：

Adam was a selfish boy who seldom thought about others. On his way to school last Tuesday, he sat in a priority seat on the commuter train because he was tired from staying up late studying for an exam. In front of Adam stood a hunchbacked old man with a cane. Adam pretended to be absorbed in his textbook and didn't give his seat to the old man.

In the afternoon, Adam sprained his ankle while playing basketball with his classmates. His ankle swelled so badly that he could hardly walk. He had no choice but to borrow a crutch from the health center.

On Adam's way back home, the commuter train was as crowded as usual. Adam had a hard time keeping his balance on the crutch. He saw a girl sitting on a priority seat. He thought that the girl should give the seat to him. However, what he had done in the morning came to his mind, and he felt ashamed of himself for being inconsiderate. He believed that the swollen ankle was a punishment for his behavior.

Just as Adam was overwhelmed by a sense of guilt, the girl on the priority seat stood up and gave him her seat. Adam was too moved to say anything. He finally realized what a timely help could mean to those in need, and he made up his mind that he would do his best to help others from that day on.

答 案

單選題

一、詞彙題

1. B 2. C 3. A 4. D 5. C 6. B 7. A 8. D 9. B 10. C
11. C 12. D 13. A 14. D 15. C

二、綜合測驗

16. B 17. D 18. D 19. B 20. A 21. D 22. A 23. B 24. C 25. C
26. B 27. A 28. B 29. A 30. D

三、文意選填

31. D 32. I 33. E 34. C 35. B 36. J 37. A 38. F 39. G 40. H

四、閱讀測驗

41. A 42. A 43. D 44. C 45. D 46. C 47. D 48. B 49. A 50. B
51. C 52. D 53. B 54. C 55. D 56. B

非選擇題

一、中譯英

1. High housing prices in the urban/metropolitan areas have had a serious impact on the society.
2. The government is introducing new policies (in order/so as) to meet/satisfy people's demand for houses.

試題大剖析

名師／許展嘉、徐謙

中譯與解析

第壹部分：單選題

一、詞彙題

1. 中譯：昨天雨下得很大，以致於棒球比賽不得不延期到下週六。
(A) 投降 (B) 延期 (C) 拋棄 (D) 反對
本題考動詞。邏輯推理：由於雨勢很大，依常理球賽會延期。
2. 中譯：因為有愈來愈多人依賴網路取得資訊，網路已取代報紙成為最重要的新聞來源。
(A) 分配 (B) 減去 (C) 取代 (D) 轉移
本題考動詞。邏輯推理：網路的重要性隨使用人數日益提高，進而取代傳統媒體的地位。
3. 中譯：存到足夠的錢之後，喬伊預訂了兩個暑假的行程，一個是去法國，另外一個去澳洲。
(A) 預訂 (B) 觀察 (C) 隨函附寄 (D) 存入
本題考動詞。邏輯推理：度假前通常必須先預訂行程、機票等。
4. 中譯：因為我並沒有充分了解你的提案，我沒有立場針對它做任何評論。
(A) 不同之處 (B) 解決方法 (C) 需求 (D) 評論
本題考名詞。搭配詞：make comments on... (對……做評論)。
5. 中譯：貝蒂不願意接受她朋友的建議，因為她覺得自己可以想出更好的點子。
(A) 可忍受的 (B) 敏感的 (C) 不情願的 (D) 謙虛的
本題考形容詞。邏輯推理：因為覺得自己的想法更好，所以不太想接受他人的意見。
6. 中譯：這家銀行盡力吸引更多顧客。它的行員隨時都可以提供迅速的服務。
(A) 單數的 (B) 迅速的 (C) 昂貴的 (D) 可能的
本題考形容詞。聯想：可由 available 聯想到 prompt，隨時都有人可以提供服務，意味著客戶不需要等候太久。
7. 中譯：約翰在自助餐廳打工的經驗，對於他經營自己的餐廳是很好的準備。
(A) 準備 (B) 認可 (C) 形成 (D) 計算
本題考名詞。邏輯推理：在創業前可先在類似的產業工作，準備好相關的經驗。
8. 中譯：女性的時尚不斷在改變：某一季她們可能偏好長褲套裝，但下一季可能偏好迷你裙。
(A) 近來 (B) 短暫地 (C) 相對地 (D) 持續地
本題考副詞。搭配詞：constantly changing (不斷在改變)。
9. 中譯：站在海邊，我們看到一群海鷗在海上飛行，然後向下滑翔、停在水面上。
(A) 群 (獵犬、野獸) (B) 群 (飛禽、牲畜) (C) 群 (畜群、牧群) (D) 群 (魚群)
本題考名詞。搭配詞：一群飛禽應使用量詞 flock。
10. 中譯：這本書不僅具有教育性，也很有趣，讓我閱讀時歡笑、感覺放鬆。
(A) 能諒解的 (B) 會感染的 (C) 有趣的 (D) 令人氣惱的

本題考形容詞。聯想：可由 laugh 與 relaxed 聯想到 entertaining。

11. 中譯：在我的電腦前工作了一整天後，我的肩頸變得很僵硬，以致於我甚至無法轉動我的頭。
(A) 稠密的 (B) 嚴厲的 (C) 僵硬的 (D) 具體的

本題考形容詞。邏輯推理：在電腦前工作了一整天，肩頸通常會變得僵硬。

12. 中譯：在流感季節開始以前，接種流感疫苗會讓我們的身體有機會產生保護機制，對抗可能會使我們生病的病毒。
(A) 毒藥 (B) 悲慘 (C) 漏洞 (D) 病毒

本題考名詞。聯想：可由 flu 聯想到 virus。

13. 中譯：這個王國在統治者去世後開始瓦解，很快地就被鄰國占領。
(A) 瓦解 (B) 解散 (C) 反叛 (D) 撤退

本題考動詞。邏輯推理：一個國家會先瓦解，才被鄰國占領。

14. 中譯：雖然凱文在去年的歌唱比賽中失敗了，但是他並未感到挫折。今年他日夜練習，最後在比賽中得到第一名。
(A) 鬆一口氣的 (B) 有嫌疑的 (C) 打了折扣的 (D) 感到挫折的

本題考形容詞。聯想：可由 fail 聯想到 frustrated。

15. 中譯：艾瑪和喬正在為他們三歲的雙胞胎找一名長住的保母，最好是會烹飪的。
(A) 起初地 (B) 明顯地 (C) 更好地 (D) 大大地

本題考副詞。邏輯推理：徵人時通常會開出雇主所偏好的條件。

二、綜合測驗

第 16 至 20 題為題組

區碼是電話號碼中的一部分，通常代表接電話的那支電話所處的地理區域。區碼是在本地電話號碼之前的兩、三個數字。如果被撥打的電話號碼與撥打的電話號碼屬於同一個區域，通常不需要撥打區碼。相對地，本地電話號碼總是必須完整撥號。

區碼是 1947 年在美國出現的。當時區碼是以 XYX 的形式創造出來的，X 是 2 到 9 之間的任何一個數字，Y 不是 1 就是 0。人口較多的城市與地區第一碼與第三碼較小，1 是中間碼。紐約是美國最大的城市，被分配到 212 這個區碼，接著是洛杉磯 213。

在美國與加拿大之外的國家，區碼通常決定一通電話的費用。在同一個區碼下的電話，以及一小群鄰近的區碼，通常會比該區碼之外的電話便宜。

16. 依句意，電話號碼是「被撥打」，應使用「be + 過去分詞」表達被動。
17. 此處帶有「對比」的意味，應使用 on the other hand (相對地)：區碼不一定要撥，但本地電話號碼一定要完整撥號。
(A) 事實上 (B) 舉例來說 (C) 同時 (D) 相對地
18. in the format of...意思為「以……形式」。
19. 依句意應選 assigned 「分配」。
(A) 預訂 (B) 分配 (C) 代表 (D) 組裝
20. 依句意應選 cost 「費用」。
(A) 費用 (B) 形式 (C) 品質 (D) 距離

第 21 至 25 題為題組

對於將錢投資在硬幣的硬幣收藏家來說，一枚硬幣的價值取決於各式各樣的因素。首先，稀有是一個主要的決定性因素。一枚硬幣愈稀有，就會愈值錢。然而，要注意稀有的程度與一枚硬幣的年代沒有什麼關係。很多好幾千年的硬幣常常都只賣了幾塊錢，因為同樣的硬幣有很多，而一枚 1913 年有自由女神頭像的鎳幣可能可以賣到超過 100 萬美金，因為現存只有五個。此外，對某個硬幣的需求也會大大地影響其價值。有些硬幣可能因為在收藏家之間很受歡迎而值高價。舉例來說，一枚 1798 年的一角硬幣比一枚 1916 年的硬幣稀有多了，但後者可以賣得的價錢卻高多了，純粹因為收藏 20 世紀初期一角硬幣的人，多於（收藏）1700 年代的一角硬幣。

21. 本題考句型「愈……，就愈……」：the + 比較級..., the + 比較級。
22. 由下文的 thousand-year-old 可聯想到 age。
23. 連接詞 while 可用於表「對比」。此處的對比在於硬幣的價值可以從幾塊錢到超過 100 萬美元。
24. 依句意應選 greatly（大大地）。
(A) 只有 (B) 幾乎不 (C) 大大地 (D) 大略地
25. 依句意應選 the latter（後者）。

第 26 至 30 題為題組

法國心理學家 Alfred Binet（1859-1911）採取了一個與當時大多數其他心理學家不同的方法：他感興趣的地方是正常的心智如何運作，而不是心理疾病的本質。他想要找到一個方法，來測量不在任何特定領域教育範圍內的思考與推理能力。在 1905 年，他發展出一個測驗，要求小孩做一些活動，例如照著指令行動、模仿固定的模式、講出事物的名稱、將物品擺整齊或適當地排列物品。他之後根據他研究法國孩童而蒐集到的資料，創造出一套標準來測量孩子們的智能。如果 70% 的 8 歲孩童可以通過某項測驗，能夠成功通過這項測驗就代表達到了 8 歲孩童的智力程度。「智力商數」（IQ）這種說法從 Binet 的研究中進入了英語的詞彙。IQ 是「心智年齡」除以生理年齡的商數乘以 100，以 100 為平均。因此，一個 8 歲的孩童通過了針對 10 歲孩童的測驗，其 IQ 為 10/8 乘以 100，也就是 125。

26. rather than 前後的語意應為反義關係。
(A) 相反的 (B) 正常的 (C) 偵探的 (D) 相互的
27. 使役動詞 have 之後應接原形動詞，表達主動的意味。
(A) have + O + VR (B) keep + O + V-ing (C) want + O + to VR (D) ask + O + to VR
28. 依句意應選 based on「根據」。
(A) 由……組成 (B) 根據 (C) 造成 (D) 對抗
29. 依句意應選 success「成功通過」。
(A) 成功 (B) 反對 (C) 一致 (D) 發現
30. being the average 是分詞片語修飾 100。

三、文意選填

珊瑚礁常常被稱為「海中的雨林」，提供了一個家給海洋中 25% 的物種。珊瑚礁是堅硬的構造，充滿黑暗的隱匿處，魚類與海中生物可以在那裡產卵、逃離掠食者。若是沒有這些水底下的「公寓房子」，海洋中的魚類可能會較少。有些物種甚至可能會瀕臨絕種或是完全消失。

全世界有好幾千座珊瑚礁；然而，令人悲傷的是，它們都面臨重大的危險。超過三分之一狀況不佳，以致於可能會在 10 年內死亡。很多甚至無法維持那麼久。科學家正努力找出是什麼導致這樣的破壞。還有很多問題沒有答案，但是已找到三個主要的原因。

第一個原因是陸地上的污染。污染物質隨著雨水進入河流、小溪之中，將有毒物質攜帶進入海洋。這些毒物中的化學物質使珊瑚礁死亡或是變得虛弱，因此對於疾病的抵抗力降低。

全球暖化是另外一個原因。較高溫的海洋殺死了珊瑚重要的食物來源，也就是海藻，它是微小的金綠色水中植物，住在珊瑚上。當海藻死亡，珊瑚失去色彩，最後也會死亡。這個過程稱為「珊瑚白化」，近年來愈來愈常發生。

最後一個造成珊瑚礁消失的原因是人類。人們有時候開船會撞上珊瑚礁，或是在上面下錨，敲斷大塊的珊瑚礁。在珊瑚礁上行走的潛水者也會造成嚴重的損壞。此外，因為珊瑚礁鮮豔美麗，有些人甚至將珊瑚礁折斷當成紀念品來收藏。

我們該如何幫助珊瑚礁呢？我們必須學習更多關於它們的知識，並且合作阻止可能威脅它們生存的活動。

31. 對等連接詞 and 後空格應填入原形動詞，與前方的原形動詞 lay 形成平行結構。句意為「魚類與海中生物可以在那裡產卵、逃離掠食者。」故選(D)。
32. become 之後應接形容詞。句意為「有些物種甚至可能會瀕臨絕種或是完全消失。」故選(I)。
33. 本格應填修飾全句的副詞。句意為「全世界有好幾千座珊瑚礁；然而，令人悲傷的是，它們都面臨重大的危險。」故選(E)。
34. 助動詞 might 之後應接原形動詞。句意為「超過三分之一狀況不佳，以致於可能會在 10 年內死亡。很多甚至無法維持那麼久。」故選(C)。
35. 「be + p.p.」表達被動。句意為「還有很多問題沒有答案，但是已找到三個主要的原因。」故選(B)。
36. 此處 which 為主格關係代名詞，其後應接動詞。句意為「污染物質隨著雨水進入河流、小溪之中，將有毒物質攜帶進入海洋。」故選(J)。
37. have less 之後應接名詞，且該名詞後應接 to。句意為「這些毒物中的化學物質使珊瑚礁死亡或是變得虛弱，因此對於疾病的抵抗力降低。」故選(A)。
38. 應使用副詞修飾動詞。句意為「當海藻死亡，珊瑚失去色彩，最後也會死亡。」故選(F)。
39. 冠詞 the 之後應接名詞。句意為「最後一個造成珊瑚礁消失的原因是人類。」故選(G)。
40. 介系詞之後通常接名詞。句意為「此外，因為珊瑚礁鮮豔美麗，有些人甚至將珊瑚礁折斷當成紀念品來收藏。」故選(H)。

四、閱讀測驗

第 41 至 44 題為題組

瑞士刀是一項在全世界受到認可、相當受歡迎的設計。在瑞士，有一句話說，每個瑞士公民口袋中都有一把瑞士刀。然而，瑞士刀的起源相當不起眼。

在 19 世紀晚期，瑞士軍隊發給士兵一把槍，需要特殊的螺絲起子才能拆解、清理。同時，罐頭食物在軍隊中變得很普遍。瑞士將領們決定發給每個士兵一把標準的刀子，既可以當成螺絲起子，也可以當成開罐器。

這對瑞士刀的製造商來說是救命者，因為他們正努力與更便宜的德國進口貨競爭。在 1884 年，

瑞士刀製造商 Victorinox 的經理 Carl Elsener 緊抓住這個機會，設計出軍隊所喜歡的一把士兵刀。那是一把簡單的刀子，有一個大大的刀刃、一個開罐器，以及一個螺絲起子。

這種士兵刀發行幾年之後，Schweizer Offizier Messer 上市了，也就是 Swiss Officer's Knife。有趣的是，瑞士刀從未發給在軍中服役的人。瑞士軍隊的採買者認為這種有拔塞鑽，可以用來開酒的新型刀並非「生存所必要」的東西，所以軍官必須自行購買。然而，其特殊多功能的設計後來使這種刀成為全球品牌。在第二次世界大戰之後，很多美國士兵駐紮在歐洲。因為他們能夠在軍事基地的商店裡買到瑞士刀，所以他們買了一大堆。不過 Schweizer Offizier Messer 這個詞對他們來說似乎太難唸了，所以他們就把這種刀稱為瑞士刀，也就是如今全球知名的名稱。

41. 這篇文章的主要目的是什麼？

- (A) 解釋瑞士刀的起源。
- (B) 介紹瑞士刀的功能。
- (C) 強調瑞士刀的重要性。
- (D) 述說關於瑞士刀發明者的故事。

解析：第一段最後一句提到 But the knife had humble beginnings，下文由此開展。

42. 第三段的代名詞 “It” 所指為何？

- (A) 瑞士軍隊每個士兵都需要一把刀。
- (B) 每個瑞士公民口袋中都有一把刀。
- (C) 瑞士刀當時正與其他進口刀競爭。
- (D) 罐裝食物逐漸在瑞士軍隊中受到歡迎。

解析：第三段開頭的 It 即代表前一段的最後一句。

43. 為什麼瑞士軍隊不購買瑞士刀？

- (A) 刀的設計太簡單。
- (B) 刀都賣給美國士兵了。
- (C) 軍隊沒有購買的預算。
- (D) 新的設計不被認為對軍官來說是必要擁有的。

解析：答案可從最後一段的第 3 句 The Swiss military purchasers considered the new model with a corkscrew for opening wine not “essential for survival,”... 得知。

44. 在本文的討論中，誰給了刀子 the Swiss army knife 這個名稱？

- (A) Carl Elsener。
- (B) 瑞士的將軍。
- (C) 美國的士兵。
- (D) 德國的生意人。

解析：答案可從最後一段的最後一句得知。

第 45 至 48 題為題組

太空是我們的未來——到月球、火星以及更遠的地方旅行。大部分的人會認為，除了彗星與恆星之外，外太空沒有什麼其他東西。然而，自從我們的太空旅行開始以來，我們已在那裡留下如此多的垃圾，以致於科學家現在很擔心，如果不清理，我們可能會處於致命的危險之中。

第一件太空垃圾是在 1964 年創造出來的，當時美國衛星 Vanguard 一號停止運作，與地面中心

失去聯繫。然而，因為它持續繞著地球在軌道中運行，沒有造成任何後果，所以科學家變得對於將不再有用的東西丟棄在太空中，愈來愈不在乎。

估計目前有超過 50 萬件人造垃圾在地球軌道中運行，時速高達每小時 17,500 英里。這些垃圾小至從火箭掉落的小片油漆，到照相機、大型燃料槽，甚至還有奇怪的東西，像是太空人 Heidemarie Stefanyshyn-Piper 在太空漫步時弄丟價值上百萬美元的工具箱。

這些太空垃圾主要的問題在於它們可能會撞擊到運作中的衛星，並且傷害旅行中的太空船。此外，垃圾可能會相撞、裂成碎片並掉回地球。為了避免這一點，科學家已設計出幾個方式清理太空。他們已建立起地面工作站監控較大的太空垃圾，避免它們撞擊到運作中的衛星或太空梭。未來的計畫包括各國之間一起努力、合作，停止在太空中亂丟垃圾，並清除已經存在的垃圾。

45. 哪一個是第一個人造的太空垃圾？

- (A) 照相機。
- (B) 工具箱。
- (C) 燃料槽。
- (D) 壞掉的衛星。

解析：答案在第二段，第一個人造的太空垃圾是美國衛星 Vanguard 一號。

46. 為什麼科學家一開始不關心太空垃圾？

- (A) 太空垃圾沒有用途了。
- (B) 太空垃圾距離地球好幾百萬英里之外。
- (C) 太空垃圾沒有造成任何問題。
- (D) 太空垃圾被認為跟彗星、恆星相似。

解析：答案在第二段最後一句...since it kept orbiting around the Earth without any consequences, ...。

47. 下列關於太空垃圾的敘述何者正確？

- (A) 太空垃圾是大型、很重的機器。
- (B) 太空垃圾不會改變位置。
- (C) 太空垃圾慢慢地繞地球飄浮。
- (D) 太空垃圾可能會對太空梭造成問題。

解析：答案在最後一段的第一句。

48. 關於太空垃圾問題，已經做了哪件事情？

- (A) 科學家已清理大部分的太空垃圾。
- (B) 大型的太空垃圾正被密切觀察中。
- (C) 很多國家已經合作來停止汙染太空。
- (D) 已建立地面工作站幫忙在太空中適當地儲存垃圾。

解析：答案在最後一段的第 4 句 Ground stations have been built to monitor larger pieces of space trash...。

第 49 至 52 題為題組

警察常常會使用酒精呼吸測試 (ABT) 以查出一個人是否酒後駕車。在美國，血液中酒精的法定上限為 21 歲以上者 0.08%，而未滿 21 歲者不允許在駕車時身體中有任何的酒精。若被測出超過

法定值，警方可逮捕該名駕駛。然而，很多在測試時呈現陽性反應的人宣稱他們只喝了非酒精的提神飲料。這些提神飲料中，有一種會使人在 ABT 測試中呈現陽性反應嗎？密蘇里的研究人員做了實驗以找出真相。

首先，測量 27 種不同的提神飲料中的酒精含量。除了一種之外，其他所有提神飲料的酒精含量都超過 0.005%。其中有 9 種的酒精含量至少達到 0.096%。科學家於是調查少量的酒精是否有可能會被 ABT 測試偵測到。他們要求受試者喝下一整罐或整瓶提神飲料，喝完後的 1 分鐘與 15 分鐘後為每位受試者進行 ABT 測試。

在喝完的 1 分鐘之內測試的話，27 種提神飲料中，ABT 偵測到其中 11 種有酒精存在。然而，喝完的 15 分鐘後測試的話，就不會偵測到任何飲料中的酒精。這點顯示，什麼時候進行測試在測試的結果中扮演重要的角色。在喝完這些飲料後愈快進行測試，就愈有可能得到陽性的酒精反應。

49. 一個剛滿 20 歲的人，在美國法定的酒精值是多少？

- (A) 0.000%。
- (B) 0.005%。
- (C) 0.080%。
- (D) 0.096%。

解析：答案在第一段的第 2 句 ...while people under 21 are not allowed to drive a car with any level of alcohol in their body.。

50. 密蘇里的實驗有什麼目的？

- (A) 介紹一種計算血液中酒精含量的新方法。
- (B) 發現提神飲料與 ABT 測試結果之間的關係。
- (C) 警告飲用混有酒精的提神飲料的危險。
- (D) 挑戰美國目前駕駛者法定的酒精值。

解析：密蘇里的實驗所要回答的研究問題在第一段的第 5 句 Can one of these energy drinks really cause someone to test positive on an ABT? 有提到。

51. 實驗的參與者在喝完提神飲料之後被要求做什麼事情？

- (A) 在實驗室中排隊。
- (B) 回想飲料的牌名。
- (C) 參加 ABT 測試。
- (D) 檢測他們的口氣清新與否。

解析：答案在第二段的最後一句。

52. 對於提神飲料的使用者來說，影響 ABT 測試結果最重要的因素為何？

- (A) 受試者的年齡。
- (B) 施測的地點。
- (C) 測試所使用的設備。
- (D) 測試的時間。

解析：答案在本文的最後一句。

第 53 至 56 題為題組

大部分的印度婦女在雙眉之間有一個紅點。雖然這通常是顯示她們的婚姻狀況，但這項做法主

要是與印度教有關。在不同的印度方言中，這個點有不同的名稱，bindi 是最廣為人知的。傳統上來說，這個點沒有性別限制：男人和女人都可以有。然而，男性點紅痣的傳統近來已消失，所以我們現在看到女人比男人更常有紅痣。

紅痣 bindi 的位置是有標準的：前額中央，靠近眉毛。這代表第三隻眼睛，也就是內心的眼睛。印度教傳統認為，所有人都有三個眼睛：兩個外在的眼睛是用來看外在的世界，第三個眼睛是往內專注於神。就因為這樣，這個點意味著虔誠，當成是持續的提醒，要將神放在信仰者思想的優先部分。

紅色是這個點的傳統顏色。據說，在古代，男人會在妻子的雙眼之間放一滴血，來確保他們的婚姻。根據印度教的信仰，紅色被認為可以為這對新人帶來好運。現在，人們依據自己的偏好而有不同的顏色。女性往往會搭配衣服的顏色決定這個點該是什麼顏色。裝飾用的 bindi 或是 bindi 貼紙有不同的大小、顏色和樣式。年輕人與老人、已婚者與未婚者都可以使用。與其說 bindi 是宗教習俗，不如說是一種時尚宣言。

53. 為什麼印度人會開始在前額點紅痣？

- (A) 指出他們的社會階級。
- (B) 表達他們的宗教信仰。
- (C) 展示他們的經濟地位。
- (D) 凸顯他們的家族背景。

解析：答案在第一段的第 2 句 ...the practice is primarily related to the Hindu religion.。

54. 在印度教的傳統中，第三個眼睛的意義是什麼？

- (A) 與自然和諧相處。
- (B) 更清楚地觀察外在的世界。
- (C) 尊敬神明。
- (D) 用主觀的觀點看事物。

解析：答案在第二段的最後一句。

55. 為什麼 bindi 一開始的顏色是選紅色？

- (A) 紅點代表神的血。
- (B) 紅色代表妻子對丈夫的愛。
- (C) bindi 這個字在某些印度方言中是紅色的意思。
- (D) 紅色一般被認為可以為新人帶來祝福。

解析：答案在第三段的第 3 句 ...the color red is believed to bring good fortune to the married couple.。

56. 關於現在使用 bindi 的做法，下列敘述何者正確？

- (A) Bindi 現在可以在臉上任何部位。
- (B) Bindi 現在被當成裝飾品。
- (C) 大部分的印度婦女不再喜歡點上 bindi。
- (D) 點上 bindi 在印度男性之間已變得更受歡迎。

解析：答案在本文的最後一句。

第貳部分：非選擇題

一、中譯英

1. 中文句子中的「了」帶有現在完成式的意味。
2. 中文句子中的「正」帶有現在進行式的意味。「以」表達目的，在英文中可使用不定詞表達目的。

二、英文作文

重點單字：

1. hunchbacked *adj.* 駝背的
2. cane *n.* 拐杖
3. pretend *v.* 假裝
4. sprain *v.* 扭傷
5. ankle *n.* 腳踝
6. swell *v.* 腫脹
7. crutch *n.* 拐杖
8. inconsiderate *adj.* 不體貼的
9. swollen *adj.* 腫脹的
10. punishment *n.* 懲罰
11. overwhelm *v.* 淹沒

重點片語：

1. think about others 替他人著想
2. on one's way to N... 在某人前往……的途中
3. priority seat 博愛座
4. commuter train 通勤電車
5. stay up late 熬夜
6. be absorbed in 埋首於
7. have no choice but to VR... 別無選擇必須……
8. as usual 一如往常
9. have a hard time V-ing... 做……有困難
10. a sense of guilt 罪惡感
11. in need 需要幫助的
12. make up one's mind 某人下定決心

中譯：

Adam 是個自私的男孩，很少為他人著想。上週二，在他上學的途中，他在通勤電車上坐在博愛座，因為他為了考試熬夜累了。在 Adam 的前面站了一位駝背、拿著拐杖的老人。Adam 假裝埋首於課本，並未讓座給這位老人。

下午，Adam 跟同學打籃球的時候扭傷了腳踝。他的腳踝腫得很厲害，以致於他幾乎無法走路。他只好向保健中心借拐杖。

在 Adam 回家的途中，通勤電車一如往常地擁擠。他拄著拐杖很難保持平衡。他看到有一個女孩坐在博愛座上。他心想這個女孩應該讓座給他。然而，他想起了自己早上所做的事，對自己的不體恤感到羞愧。他相信他腫脹的腳踝是因為他的行為而得到的懲罰。

正當 Adam 淹沒於罪惡感的時候，博愛座上的女孩站了起來，將座位讓給他。Adam 感動到說不出話來。他終於了解，及時幫助對需要的人來說具有多大的意義，他決定從那天起，要盡力幫助他人。

解析：

本文以圖中男學生一天的經歷與其心路歷程為主軸，共有四個段落。第一段描寫第一張圖片，敘述男學生自私的行為。在第一段中，為了使故事更生動，作者發揮想像力，增加了一些細節，例如：男學生占據博愛座是因為覺得自己熬夜讀書很辛苦。第二段描寫第二張圖片，敘述男學生受傷的過程與傷勢。第三段描寫第三張圖片，描述男學生在受傷後才感受到博愛座應該要讓給真正需要座位的人，同時，本段亦為故事的轉折處，點出男學生自我反省的心境改變。第四段為本文結局，敘述男學生最後得到他人的幫助，因此決定要盡力幫助他人。這樣的結局既美好又具有教育的意義，傳達出作者從這則連環漫畫中得到的啟示。