

大學入學考試中心
105學年度指定科目考試試題

英文考科

—作答注意事項—

考試時間：80分鐘

作答方式：

- 選擇題用 2B 鉛筆在「答案卡」上作答；更正時，應以橡皮擦擦拭，切勿使用修正液（帶）。
- 非選擇題用筆尖較粗之黑色墨水的筆在「答案卷」上作答；更正時，可以使用修正液（帶）。
- 未依規定畫記答案卡，致機器掃描無法辨識答案；或未使用黑色墨水的筆書寫答案卷，致評閱人員無法辨認機器掃描後之答案者，其後果由考生自行承擔。
- 答案卷每人一張，不得要求增補。

第壹部分：選擇題（占 72 分）

一、詞彙（占 10 分）

說明：第 1 題至第 10 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。

1. Microscopes are used in medical research labs for studying bacteria or _____ that are too small to be visible to the naked eye.
(A) agencies (B) codes (C) germs (D) indexes
2. Lisa hopped on her bicycle and _____ as fast as she could through the dark narrow backstreets to get home after working the night shift.
(A) bounced (B) commuted (C) tumbled (D) pedaled
3. Rated as one of the top restaurants of the city, this steak house is highly _____ to visitors by the tourism bureau.
(A) encountered (B) recommended (C) outnumbered (D) speculated
4. The manager _____ agreed to rent his apartment to me. Even though the agreement was not put in writing, I am sure he will keep his word.
(A) barely (B) stably (C) verbally (D) massively
5. For Jerry, practicing yoga three times a week is a relaxing _____ from his tight work schedule.
(A) diversion (B) medication (C) nuisance (D) fulfillment
6. Parents could be charged with neglect or abandonment if they leave their young children home alone without adult _____.
(A) intuition (B) supervision (C) compassion (D) obligation
7. Walking at a _____ pace for a shorter amount of time burns more calories than walking at a slow pace for a longer period of time.
(A) joyous (B) superb (C) brisk (D) decent
8. Plants and animals in some deserts must cope with a climate of _____—freezing winters and very hot summers.
(A) extremes (B) forecasts (C) atmospheres (D) homelands
9. The success of J.K. Rowling is _____, with her Harry Potter series making her a multi-millionaire in just a few years.
(A) eligible (B) marginal (C) confidential (D) legendary
10. The high-tech company's _____ earnings surely made its shareholders happy since they were getting a good return on their investment.
(A) robust (B) solitary (C) imperative (D) terminal

二、綜合測驗（占 10 分）

說明：第 11 題至第 20 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 11 至 15 題為題組

Have you been irritated by someone standing too close in line, talking too loud or making eye contact for too long? Or, they may have 11 you with the loud music from their earphones, or by taking up more than one seat on a crowded subway car. You feel unhappy because your personal space has been violated.

According to scientists, personal space involves certain invisible forces imposed on you through all the 12. For example, people may feel their space is being invaded when they experience an unwelcome sound, smell, or stare.

In certain situations such as in crowded subway cars or elevators, it is not always possible for people to keep their 13 distance from others. They learn coping strategies to deal with their discomfort. For instance, people often avoid eye contact with someone standing 14 them, or they pretend that these people are lifeless objects in their personal space. Given the opportunity, they may 15 to a corner, putting distance between themselves and strangers. Or, they may sit or stand equidistant from one another like birds on a wire.

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|---------------------|----------------|----------------|---------------------|
| 11. (A) offended | (B) controlled | (C) acquired | (D) supplied |
| 12. (A) angles | (B) events | (C) senses | (D) regions |
| 13. (A) prefer | (B) preferring | (C) preferred | (D) being preferred |
| 14. (A) long before | (B) close to | (C) aside from | (D) soon after |
| 15. (A) retreat | (B) explore | (C) dispense | (D) connect |

第 16 至 20 題為題組

Alan Turing was one of the leading scientific geniuses of the 20th century. Many scholars consider him the father of modern computer science. He was also the man who cracked the 16 uncrackable Enigma code used by Nazi Germany. His code-breaking turned the tide of World War II and helped save two million lives. Nevertheless, 17 people have even heard his name.

Turing displayed signs of high intelligence in math and science at a young age. By the time he was 23, he had already come up with the idea of what 18 the modern computer—the Turing machine. Today, Turing machines are still used in theoretical computation. He also proposed the now famous Turing test, used to determine whether a computer exhibits intelligent behavior equivalent to that of a human.

The postwar era, however, was a disaster for Turing. He was gay, which was then a crime in Britain. 19 being hailed as one of the crucial figures in defeating the Nazis, Turing was convicted of “gross indecency.” This 20 drove him to commit suicide in 1954, at the age of 41. Nearly 60 years after his death, Queen Elizabeth II granted Turing a formal pardon for his conviction, upon an online petition signed by prominent scientists and technology leaders around the world.

- | | | | |
|----------------------|-------------------|-----------------------|---------------------|
| 16. (A) eventually | (B) precisely | (C) concernedly | (D) supposedly |
| 17. (A) many | (B) some | (C) any | (D) few |
| 18. (A) would become | (B) should become | (C) could have become | (D) had become |
| 19. (A) Because of | (B) Instead of | (C) In addition to | (D) With respect to |
| 20. (A) compromise | (B) procession | (C) humiliation | (D) supplement |

三、文意選填（占 10 分）

說明：第 21 題至第 30 題，每題一個空格，請依文意在文章後所提供的(A)到(L)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。

第 21 至 30 題為題組

The Great Sphinx in the Giza desert is a mythological creature with the body of a lion and the head of a human being. This monumental 21 is often regarded as a national symbol of Egypt, having guarded the famous Egyptian pyramids for 4,000 years. Nevertheless, the stone creature does not look like it did 4,000 years ago; wind, water, pollution, and human contact have slowly 22 the rock. Scientists are now trying to restore it. They not only want it to look like it did when it was first built but also are looking for ways to keep it from 23 more than it has.

Fixing the Sphinx, however, is not an easy job. It takes several years of 24 before the work begins. Each stone in the Sphinx is carefully 25. Scientists use computers to help figure out the size and shape of each stone. Each old stone is given a number. Then, one by one, replacement stones are carved by hand, just like people did long ago, in the 26 sizes and shapes as the ones they are replacing. When the new stones are ready, they are 27 and the worn ones removed.

Scientists are also worried about how to keep the Sphinx from falling apart again. They have talked about 28 a wall around the Sphinx to protect it from the wind and sand, or perhaps covering it completely with a glass pyramid. Some think that burying part of it in the sand would serve the purpose. One scientist has even suggested building a 29 shelter to protect it at night and during bad weather. The walls of the shelter could be retracted into the ground during the day so that visitors could see the Sphinx.

There are no easy solutions to the 30, not to mention solutions that are agreeable to all parties. The one thing that is agreed upon is that something needs to be done to protect this ancient sculpture.

(A) movable (B) installed (C) diversified (D) problem (E) aged (F) planning
(G) measured (H) constructing (I) exact (J) deteriorating (K) statue (L) religious

四、篇章結構（占 10 分）

說明：第31題至第35題，每題一個空格。請依文意在文章後所提供的(A)到(F)選項中分別選出最適當者，填入空格中，使篇章結構清晰有條理，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 31 至 35 題為題組

Starting a business on one's own can be quite challenging and costly. To reduce the risks involved in starting a business from scratch, many people buy a franchise instead. 31 Under the license, the individual acquires the right to use the big company's brand name and agrees to sell its products.

The concept of the franchise dates back to the 19th century in the U.S. 32 Then, in the 1930s, Howard Johnson restaurants skyrocketed in popularity, paving the way for restaurant chains and the subsequent franchises that would define the unprecedented rise of the American fast-food industry.

There are many advantages to investing in a franchise. One of the benefits is the ready-made business operation. 33 Depending on the franchise, the franchisor company may offer support in training and financial planning. Some even provide assistance with approved suppliers. To new business owners, the most recognized advantage of a franchise is perhaps the well-established brand name of the franchisor such as that of McDonald's. 34

Disadvantages include heavy start-up costs as well as ongoing royalty costs on the part of the franchisee. To take the McDonald's example further, the estimated minimum cost for a franchisee to start a McDonald's is US\$500,000. And it has to pay an annual fee equivalent to 12% of its sales to McDonald's.

35 Other disadvantages include lack of territory control or creativity with one's own business.

- (A) Whether a franchise is profitable or not depends largely on the nature of the business.
- (B) Research has shown that customers tend to choose a brand they recognize over one they don't.
- (C) A franchise comes with a built-in business formula including products, services, and even employee uniforms.
- (D) Moreover, the franchisee is given no right to renew or extend the franchise after the term of the contract.
- (E) The most famous example was Isaac Singer, who created franchises to distribute his sewing machines to larger areas.
- (F) A franchise is a license issued by a large, usually well-known, company to an individual or a small business owner.

五、閱讀測驗（占 32 分）

說明：第 36 題至第 51 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 36 至 39 題為題組

Some people call it a traveling museum. Others refer to it as a living or open-air museum. Built in Brazil to celebrate the quincentennial of Columbus' first voyage to the New World, the *Nina*, a Columbus-era replica ship, provides visitors with an accurate visual of the size and sailing implements of Columbus' favorite ship from over 500 years ago.

I joined the crew of the *Nina* in Gulf Shores, Alabama, in February 2013. As part of a research project sponsored by my university, my goal was to document my days aboard the ship in a blog. I quickly realized that I gained the most valuable insights when I observed or gave tours to school-age children. The field-trip tour of the *Nina* is hands-on learning at its best. In this setting, students could touch the line, pass around a ballast stone, and move the extremely large tiller that steered the ships in Columbus' day. They soon came to understand the labor involved in sailing the ship back in his time. I was pleased to see the students become active participants in their learning process.

The *Nina* is not the only traveling museum that provides such field trips. A visit to Jamestown Settlement, for example, allows visitors to board three re-creations of the ships that brought the first settlers from England to Virginia in the early 1600s. Historical interpreters, dressed in period garb, give tours to the *Susan Constant*, *Godspeed*, and *Discovery*. These interpreters often portray a character that would have lived and worked during that time period. Students touring these ships are encouraged to interact with the interpreters in order to better understand the daily life in the past.

My experience on the *Nina* helps substantiate my long-held belief that students stay interested, ask better questions, and engage in higher-order thinking tasks when they are actively engaged in the learning process. The students who boarded the *Nina* came as passive learners. They left as bold explorers.

36. What line of business is the author engaged in?

- (A) Shipping. (B) Education.
(C) Ecological tourism. (D) Museum administration.

37. Which of the following is true about the *Nina* introduced in the passage?

- (A) She is a replica of a ship that Columbus built in Brazil.
(B) She is always crowded with foreign tourists during holidays.
(C) She is the boat Columbus sailed in his voyage to the New World.
(D) She displays a replica of the navigational equipment used in Columbus' time.

38. What is the third paragraph mainly about?

- (A) Guidelines for visitors on the ships.
(B) Life of the first settlers in Jamestown Settlement.
(C) Duties of the interpreters in the British museums.
(D) Introduction to some open-air museums similar to the *Nina*.

39. What does the author mean by the last two sentences of the passage?

- (A) The students are interested in becoming tour guides.
(B) The experience has changed the students' learning attitude.
(C) The students become brave and are ready to sail the seas on their own.
(D) The museums are successful in teaching the students survival skills at sea.

第 40 至 43 題為題組

An ancient skull unearthed recently indicates that big cats originated in central Asia—not Africa as widely thought, paleontologists reported on Wednesday.

Dated at between 4.1 and 5.95 million years old, the fossil is the oldest remains ever found of a pantherine felid, as big cats are called. The previous felid record holder—tooth fragments found in Tanzania—is estimated to be around 3.8 million years old.

The evolution of big cats has been hotly discussed, and the issue is complicated by a lack of fossil evidence to settle the debate.

“This find suggests that big cats have a deeper evolutionary origin than previously suspected,” said Jack Tseng, a paleontologist of the University of Southern California who led the probe.

Tseng and his team made the find in 2010 in a remote border region in Tibet. The fossil was found stuck among more than 100 bones that were probably deposited by a river that exited a cliff. After three years of careful comparisons with other fossils, using DNA data to build a family tree, the team is convinced the creature was a pantherine felid.

The weight of evidence suggests that central or northern Asia is where big cats originated some 16 million years ago. They may have lived in a vast mountain refuge, formed by the uplifting Himalayas, feeding on equally remarkable species such as the Tibetan blue sheep. They then dispersed into Southeast Asia, evolving into the clouded leopard, tiger and snow leopard lineages, and later movements across continents saw them evolve into jaguars and lions.

The newly discovered felid has been called *Panthera Blytheae*, after Blythe Haaga, daughter of a couple who support a museum in Los Angeles, the university said in a news release.

40. According to the passage, why is the origin of big cats a hot issue?
(A) Because not many fossils have been found.
(B) Because they moved across continents.
(C) Because no equipment was available for accurate analysis.
(D) Because they have evolved into many different species of felid.
41. Where was the new felid fossil found?
(A) In Tanzania. (B) In Tibet. (C) In California. (D) In Southeast Asia.
42. According to the passage, which of the following statements is true regarding big cats?
(A) Some big cats evolved into jaguars 16 million years ago.
(B) The oldest fossil of big cats ever discovered is 3.8 million years old.
(C) Big cats are descendants of snow leopards living in high mountains.
(D) Tibetan blue sheep was a main food source for big cats in the Himalayas.
43. What is the purpose of this passage?
(A) To promote wildlife conservation. (B) To report on a new finding in paleontology.
(C) To introduce a new animal species. (D) To compare the family trees of pantherine felids.

第 44 至 47 題為題組

American cooking programs have taught audiences, changed audiences, and changed with audiences from generation to generation. In October 1926, the U.S. Department of Agriculture created this genre’s first official representative, a fictional radio host named Aunt Sammy. Over the airwaves, she educated homemakers on home economics and doled out advice on all kinds of matters, but it was mostly the cooking recipes that got listeners’ attention. The show provided a channel for transmitting culinary advice and brought about a national exchange of recipes.

Cooking shows transitioned to television in the 1940s, and in the 1950s were often presented by a cook systematically explaining instructions on how to prepare dishes from start to finish. These programs were broadcast during the day and aimed at middle-class women whose mindset leaned toward convenient foods for busy families. Poppy Cannon, for example, was a popular writer of *The Can-Opener Cookbook*. She appeared on various television shows, using canned foods to demonstrate how to cook quickly and easily.

Throughout the sixties and seventies, a few chef-oriented shows redefined the genre as an exhibition of **haute** European cuisine by celebrity gourmet experts. This elite cultural aura then gave way to various cooking styles from around the world. An example of such change can be seen in Martin Yan's 1982 "Yan Can Cook" series, which demonstrated Chinese cuisine cooking with the catchphrase, "If Yan can cook, you can too!" By the 1990s, these cooking shows ranged from high-culture to health-conscious cuisine, with chefs' personalities and entertainment value being two keys to successful productions.

At the beginning of the 21st century, new cooking shows emerged to satisfy celeb-hungry, reality-crazed audiences. In this new millennium of out-of-studio shows and chef competition reality shows, chefs have become celebrities whose fame rivals that of rock stars. Audiences of these shows tend to be people who are interested in food and enjoy watching people cook rather than those who want to do the cooking themselves, leaving the age-old emphasis on following recipes outmoded.

44. Which of the following is closest in meaning to "**haute**" in the third paragraph?
(A) Coarse. (B) Civilian. (C) Various. (D) High-class.
45. Which of the following is true about audiences of American cooking shows?
(A) Those in the '30s preferred advice on home economics to cooking instructions.
(B) Those in the '40s and '50s were interested in food preparation for busy families.
(C) Those in the '60s and '70s were eager to exchange recipes with each other.
(D) Those in the '80s enjoyed genuine American-style gourmet cooking.
46. According to the passage, which of the following is true about the most recent cooking programs?
(A) They are often hosted by rock stars. (B) They are often not filmed in the studios.
(C) They attract many celebrity viewers. (D) They invite hungry audience members to be judges.
47. Which of the following would most likely be a hit cooking show in the '90s?
(A) A show dedicated to European cuisine and gourmet food.
(B) A show sponsored by food companies advertising new products.
(C) A show hosted by a humorous chef presenting low-calorie dishes.
(D) A show with a professional cook demonstrating systematic ways of cooking.

第 48 至 51 題為題組

Screaming is one of the primal responses humans share with other animals. Conventional thinking suggests that what sets a scream apart from other sounds is its loudness or high pitch. However, many sounds that are loud and high-pitched do not raise goose bumps like screams can. To find out what makes human screams unique, neuroscientist Luc Arnal and his team examined a bank of sounds containing sentences spoken or screamed by 19 adults. The result shows screams and screamed sentences had a quality called "roughness," which refers to how fast a sound changes in loudness. While normal speech sounds only have slight differences in loudness—between 4 and 5 Hz, screams can switch very fast, varying between 30 and 150 Hz, thus perceived as being rough and unpleasant.

Arnal's team asked 20 subjects to judge screams as neutral or fearful, and found that the scariest almost always corresponded with roughness. The team then studied how the human brain responds to roughness using fMRI brain scanners. As expected, after hearing a scream, activity increased in the brain's auditory centers where sound coming into the ears is processed. But the scans also lit up in the amygdala, the brain's fear center.

The amygdala is the area that regulates our emotional and physiological response to danger. When a threat is detected, our adrenaline rises, and our body prepares to react to danger. The study discovered that screams have a similar influence on our body. It also found that roughness isn't heard when we speak naturally, regardless of the language we use, but **it** is prevalent in artificial sounds. The most aggravating alarm clocks, car horns, and fire alarms possess high degrees of roughness.

One potential application for this research might be to add roughness to alarm sounds to make them more effective, the same way a bad smell is added to natural gas to make it easily detectable. Warning sounds could also be added to electric cars, which are particularly silent, so they can be efficiently detected by pedestrians.

48. What is the first paragraph mainly about?

- (A) Different types of screams. (B) Human sounds and animal cries.
(C) Specific features of screams. (D) Sound changes and goose bumps.

49. According to the passage, which of the following is **NOT** a finding by Arnal's team?

- (A) Changes in volume make screams different from other sounds.
(B) Only humans can produce sounds with great loudness variation.
(C) Normal human speech sounds vary between 4 to 5 Hz in loudness.
(D) Drastic volume variation in speech can effectively activate the amygdala.

50. What does "**it**" in the third paragraph refer to?

- (A) The study. (B) Language. (C) Roughness. (D) The amygdala.

51. Which of the following devices may be improved with the researchers' findings?

- (A) Smoke detectors. (B) Security cameras.
(C) Electric bug killers. (D) Fire extinguishers.

第貳部分：非選擇題（占 28 分）

說明：本部分共有二題，請依各題指示作答，答案必須寫在「答案卷」上，並標明大題號（一、二）。作答務必使用筆尖較粗之黑色墨水的筆書寫，且不得使用鉛筆。

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，並標明子題號（1、2）。每題 4 分，共 8 分。

1. 蚊子一旦叮咬過某些傳染病的患者，就可能將病毒傳給其他人。
2. 它們在人類中快速散播疾病，造成的死亡遠超乎我們所能想像。

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：最近有一則新聞報導，標題為「碩士清潔隊員（waste collectors with a master's degree）滿街跑」，提及某縣市招考清潔隊員，出現 50 位碩士畢業生報考，引起各界關注。請就這個主題，寫一篇英文作文，文長至少 120 個單詞。文分兩段，第一段依據你的觀察說明這個現象的成因，第二段則就你如何因應上述現象，具體（舉例）說明你對大學生涯的學習規劃。