

臺北區 109 學年度第一學期
第二次學科能力測驗模擬考試

英文考科

—作答注意事項—

考試範圍：第 1 ~ 5 冊

考試時間：100 分鐘

題型題數：

第壹部分

- 單選題共 56 題

第貳部分

- 非選擇題共二大題

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。

祝考試順利



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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。

1. The thorn went deep into the _____ of my hand, which made me suffer a lot from the piercing pain.
(A) ankle (B) flesh (C) blush (D) balm
2. To fulfill her dream as a model walking down the catwalk during Milan Fashion Week, Janet _____ to lose ten pounds.
(A) performed (B) consulted (C) resolved (D) reserved
3. When mentioning the campaign of cleaning the beach, the teacher thought the students would not take it seriously, but it turned out they were _____ interested in it.
(A) persuasively (B) genuinely (C) necessarily (D) innocently
4. The president threatened to cancel daily briefings and lashed out at _____ media that kept asking hostile questions.
(A) essential (B) evident (C) suspicious (D) aggressive
5. It was a delightful moment when the song George _____ for his girlfriend was broadcast by their favorite DJ.
(A) requested (B) declared (C) revealed (D) pursued
6. The main part of the wedding is the _____, where hundreds of relatives and friends come to celebrate and enjoy the feast together.
(A) banquet (B) recipe (C) cuisine (D) delicacy
7. Due to seasonal allergy, my nose is always _____, which makes me sneeze frequently.
(A) splashing (B) tickling (C) refreshing (D) frowning
8. After careful consideration, the boss _____, giving his employees extra holidays but no raise.
(A) compromised (B) transformed (C) memorized (D) impressed
9. The director was _____ about camera setups, angles and lenses. All the performers had to rehearse several times in order to meet his standards.
(A) tolerant (B) moderate (C) obedient (D) particular
10. There is a sand playground in a corner of the park where children can _____ the sand into a bucket with their hands.
(A) spark (B) retain (C) scoop (D) grind
11. The school children were wearing traditional _____ for their performance on the national holiday.
(A) contracts (B) merchants (C) costumes (D) trumpets

12. After the fire at a KTV that resulted in six deaths, the mayor apologized for not fully protecting the consumers through the fire safety _____.
- (A) admissions (B) objections (C) appointments (D) inspections
13. Some of these new theories are so _____ that it is hard for common people to understand them.
- (A) desperate (B) sufficient (C) furious (D) abstract
14. Our company's overall performance has grown by 15% this year, which is _____ considering the global economic downturn due to the outbreak of COVID-19.
- (A) additional (B) pessimistic (C) remarkable (D) permanent
15. When students are away from home to attend college, they should try to eat as _____ as possible to stay healthy.
- (A) instantly (B) sensibly (C) resistantly (D) eloquently

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

Slovenia is a small Balkan country. The “love” country lies in South Central Europe in the Julian Alps at the northern end of the Adriatic Sea. 16. its small size, this Alpine country boasts diverse geographic landscapes. With the collapse of the Yugoslav federation in 1991, its tourism has greatly increased in importance since then. Foreign visitors, many of 17. simply used to pass through Slovenia on their way to the eastern Mediterranean, now take advantage of recreational opportunities such as skiing, hiking, boating, fishing, and hunting. A particularly notable attraction is the system of limestone caves at Škocjan, which was designated as a World Heritage Site in 1986.

18., hot-springs and mineral-water resorts have gained popularity; one such spa, Rogaška Slatina, is housed in a Neoclassical building from the Habsburg era. Other prominent resorts include Portoro-Portorose on the Adriatic Sea and 19. in the Alpine towns of Bled, Bohinj, and Bovec. Dozens of surviving medieval structures are also found in Slovenia; one of the most majestic is the Castle of Ljubljana, built in 1144 on a hilltop 20. Ljubljana, the capital city. Ljubljana is home to many excellent examples of Baroque architecture, including an Ursuline church and a Franciscan monastery.

16. (A) With regard to (B) By means of (C) In spite of (D) On account of
17. (A) them (B) these (C) which (D) whom
18. (A) In addition (B) As a result (C) In contrast (D) In fact
19. (A) that (B) those (C) one (D) ones
20. (A) surrounding (B) overlooking (C) composing (D) observing

第21.至25.題為題組

Beyond Meat, founded in 2009, is a Los Angeles-based producer of plant-based meat substitutes. The company develops and manufactures a variety of protein-based food products designed to simulate chicken, beef, and pork sausage. Nowadays, Beyond Meat is available in more than 50 countries, Taiwan 21. .

Beyond Meat products, the vegan meat substitutes, are made from mixtures of plant materials like pea protein, rice protein, potato starch, canola oil, coconut oil and pomegranate powder with 22. vitamins and minerals. The ingredients are mixed and fed into a food extrusion machine that cooks the mixture and uses steam, pressure, and cold water to form the product's meat-like 23. . Beef products that “bleed” are achieved by using red beet juice.

Beyond Meat obtained non-GMO certification through the Non-GMO Project in July 2018, 24. that all materials, suppliers and manufacturing facilities are free of genetically modified organisms (GMOs). According to a life cycle assessment (LCA) of the Beyond Burger from the University of Michigan, making a Beyond Burger generates 90% fewer greenhouse gas 25. than producing a 1/4 pound of U.S. beef. Besides, it has less impact on water resources and land use.

21. (A) including (B) inclusive (C) included (D) to include
22. (A) a host of (B) a school of (C) a swarm of (D) a pride of
23. (A) extent (B) texture (C) extract (D) context
24. (A) ensures (B) ensured (C) ensure (D) ensuring
25. (A) contributions (B) conventions (C) possessions (D) emissions

第26.至30.題為題組

The Coriolis Effect is basically an apparent force relative to the Earth's surface. It causes objects to appear 26. they were moving in somewhat of a curved path. What is actually happening is that objects are moving straight and it is the Earth turning 27. makes them look like they are curving. So more practically, it causes apparent deflection of moving objects to the right in the Northern Hemisphere, to the left in the Southern Hemisphere, and no apparent deflection on the 28. .

Therefore, it seems reasonable enough to think that the Coriolis Effect would affect the way the water spins down the drain. Indeed, natural phenomena such as hurricanes and other large cyclonic systems are highly affected by the Coriolis Effect 29. which way they spin. In fact, a hurricane might literally be 500 miles in diameter and last for many days, while your sink or toilet is very small in comparison and the time the Coriolis Effect has to influence the draining water is very short. Other factors like the shape of the sink and the direction the jets are 30. in the toilet have more effect on the swirling water in your toilet than the Coriolis Effect. Simply put, the Coriolis Effect has little impact on small devices.

26. (A) if (B) even if (C) as if (D) only if
27. (A) that (B) which (C) how (D) what
28. (A) property (B) equator (C) formula (D) canyon
29. (A) for fear of (B) by virtue of (C) in terms of (D) on behalf of
30. (A) pointed (B) launched (C) produced (D) displayed

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。

第31.至40.題為題組

How much we enjoy summer is greatly affected by how many mosquitoes there are waiting for us outside. Their bites are itchy and their drone is 31.; besides, there is also concern that mosquitoes carrying dangerous diseases are knocking on our door. So, what causes mosquito populations to 32. or shrink?

In short, it is a combination of weather and climate—mosquitoes are very 33. to their environment. Temperature and rainfall are two major 34. of mosquito abundance. These two factors have a massive effect on their survival and ability to reproduce. How much it rains at one time, when it rains, how long a cold or warm period lasts, and when it happens all 35. when it comes to predicting what kind of mosquito season lies ahead.

Mosquitoes, like most insects, are cold-blooded, or ectothermic. Unlike us, their body temperature 36. matches the temperature of the environment (air or water) around them. If it is cold outside, they are cold. If it is warm outside, they are warm. Any time spent outside of their comfort zone can slow or stop their development or even cause them to be 37. and die. In order for most mosquito larvae to grow, temperatures need to be above a threshold. The threshold varies, 38. on the species, but is typically around 7 to 16 degrees Celsius.

Since the larvae are entirely 39., they need a source of standing water (like your flower pot) that will remain until they are ready to emerge as adults. This means that dry conditions hitting at the right time during larval development in the spring or summer can 40. reduce the number of adult mosquitoes looking for a meal a week or two later.

- | | | | | |
|-----------------|-------------|---------------|----------------|-------------|
| (A) drastically | (B) matter | (C) depending | (D) predictors | (E) injured |
| (F) annoying | (G) aquatic | (H) sensitive | (I) balloon | (J) closely |

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

Few sounds cause humans to cringe more than fingernails across a chalkboard, a fork scraped on a plate, or a heavy metal chair dragged across a tiled floor. But what is the exact quality making this sort of scraping noise so offensive to our brains that many even describe it as painful?

In 1986, three researchers, D. Halpern, James Hillenbrand, and Randolph Blake, conducted a study trying to figure out what exactly in these sounds humans hate so much. In the study, the researchers

hypothesized that the high-pitched sounds caused the issue, and thus isolated the sounds between low, middle, and high frequencies. After playing these recordings to subjects, surprisingly, they found they were wrong. The removal of the high frequencies didn't reduce the aversive qualities of the sound, but removing the middle frequencies (between 2,000 and 4,000 Hertz) of the sound did.

From there, they hypothesized that these middle frequencies must resemble either those of a sound produced by a predator or a warning cry of another primate. They eventually found that the sound waves associated with a primate's warning cries, particularly a chimpanzee's warning cries, are strikingly similar in appearance to the ear-piercing, middle frequency sound waves produced by fingernails across a chalkboard.

Potentially worth noting is that a chimpanzee-human primate was the last common ancestor between humans and our hairier brothers, thought to have split around 13 million years ago, though hypothesized by some to still be interbreeding up to about 4 million years ago.

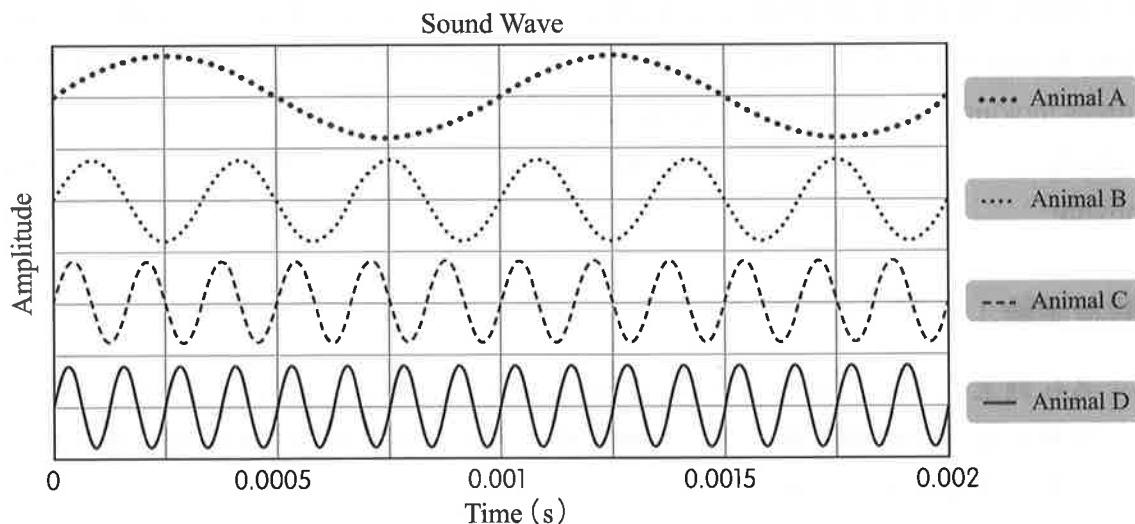
In any event, Blake then summed up that the reason why the sound of fingernails across a chalkboard has an almost universal aversive quality—it triggers in us an unconscious, automatic reflex that we are hearing a warning cry.

41. In which journal or magazine is this passage most likely to be found?

- (A) *Fashion Magazine.*
- (B) *Popular Mechanics.*
- (C) *Invention & Technology.*
- (D) *The Journal of Neuroscience.*

42. The following graph shows the sound waves of four different animals. Which animal probably has the most offensive frequency to humans?

Reference: Frequency is the number of oscillations (repetitive variations) in the unit of time (1 second).



- (A) Animal A.
- (B) Animal B.
- (C) Animal C.
- (D) Animal D.

43. According to the passage, which of the following is NOT true?

- (A) Chimpanzees and human beings have common ancestors.
- (B) The result of the experiment proved the researchers' first hypothesis was right.
- (C) The removal of the middle frequencies of the sound is more pleasant to the ears.
- (D) The sound of a fork scraped on a plate is ear-piercing as well as painful to our brains.

44. Why is the sound of fingernails across a chalkboard offensive to people?
- (A) It has high-pitched frequencies.
 - (B) It is produced by a chimpanzee.
 - (C) It reminds people of something dangerous.
 - (D) It arouses our curiosity of the unknown.

第45.至48.題為題組

Bushfires in Australia impact extensive areas, cause property damage, and have accounted for countless deaths of people and animals. Fatal as they may be, bushfires have always been a part of Australia's ecology and environment. Some of the country's native flora has evolved to rely on bushfires for reproduction, and fire events have been an interwoven part of the ecology of the continent for thousands of years. Aboriginal Australians used to use fire to clear grasslands for hunting and to clear tracks through dense vegetation; however, this was only in periods of high rainfall and in very small grassland zones bordering desert. Fire management, logging, and farming strategies changed significantly with the arrival of European settlers in the 19th century. This led to more frequent bushfires later on.

Bushfires can be triggered by natural causes such as lightning, but more frequently by man-made events such as arcing from overhead power lines, arson, accidental ignition in the course of agricultural clearing, and the like. Fires can also be spread by black kites, whistling kites and brown falcons. **They** have been spotted picking up burning twigs, flying to areas of unburned grass and dropping them to start new fires there, which exposes their prey such as rats and hares attempting to flee the blazes.

Some reports indicate that heatwaves and drought associated with global warming have also **exacerbated** the problem. A changing climate with hotter, drier conditions makes the country's fire season longer. Strong winds also promote the rapid spread of fires by lifting burning embers into the air. Large, violent wildfires can generate winds of their own, called fire whirls. Fire whirls are like tornadoes, hurling flaming logs and burning debris over considerable distances and can start a new fire up to 40 km downwind from the fire front. Scientists believe the factors above contributed to the ferocity of the notorious bushfires from late 2019 to early 2020.

45. What is this passage mainly about?
- (A) The causes contributing to bushfires.
 - (B) The history of bushfires in Australia.
 - (C) The effect of bushfires on the life of Australians.
 - (D) The ferocity of the notorious 2019–20 bushfires.
46. What does “**They**” in the second paragraph refer to?
- (A) People flying kites.
 - (B) Large birds of prey.
 - (C) Small mammals attempting to flee the blazes.
 - (D) Man-made events such as accidental ignition.
47. Which is closest in meaning to the word “**exacerbated**” in the last paragraph?
- (A) Improved.
 - (B) Prevented.
 - (C) Worsened.
 - (D) Addressed.

48. According to the passage, which of the following statements about bushfires is true?

- (A) Natural causes have triggered more bushfires than man-made events.
- (B) Bushfires play a role in the reproduction of certain native plants in Australia.
- (C) Farming strategies of European settlers have little to do with more frequent bushfires today.
- (D) Aboriginal Australians still maintain a tradition of using fire to clear grasslands for hunting.

第49.至52.題為題組

In an unprecedented event, a district court in the Netherlands stopped a digital identification scheme because of data privacy and human rights concerns.

System Risk Indicator (SyRI), an automatic big data analysis system used for detecting potential benefit fraud, was created by the Dutch Ministry of Social Affairs in 2014. Legislation passed by the Dutch parliament allowed the system to gather 17 categories of government data, including tax records, employment records, and vehicle registrations. SyRI can create risk profiles from individuals that committed social security fraud in the past and then scan for “similar” citizen profiles, finding out potential people who may also commit fraud, or be at a higher risk of doing so in the future.

The Dutch government claimed this system was necessary to help fight social security fraud, while civil society groups suspicious of the project began investigating the tool and talking with residents about where it was used. Many were shocked to hear their neighborhoods were being spied on digitally, and complaints began to grow. They considered that SyRI posed significant potential threats to human rights and might discriminate by connecting lower income or immigrant background to higher risk of fraud.

The court’s decision suggested the program didn’t fit with principles of transparency and minimizing data collection stated in the EU’s *General Data Protection Regulation* (GDPR), which took effect in 2018. The ruling against SyRI showed several European countries strive to **put the brakes on** the interference in human rights by collecting and analyzing personal information. Take Sweden for example. Sweden’s data protection authorities fined a local agency more than \$20,000 for a three-week test of a facial recognition system that recorded each time a student entered a classroom. The Dutch court has accordingly ordered an immediate halt to the use of SyRI, which leaves several EU policymakers to work on a framework to regulate intrusive application of artificial intelligence.

49. What is the passage mainly about?

- (A) Technological innovation of SyRI.
- (B) Examples of social security fraud cases in several European countries.
- (C) The benefits and drawbacks of a digital identification program.
- (D) The ruling against SyRI and its controversial issues.

50. According to the second paragraph, which of the following data could possibly be collected by SyRI?

- (A) Personal pictures and posts on cyber space.
- (B) One’s academic performance and class attendance on a report card in high school.
- (C) A file of one’s income, business profits and the contribution to state revenue.
- (D) A document of one’s marital status.

51. What does “**put the brakes on**” in the fourth paragraph refer to?

- (A) To stop the progress of something.
- (B) To facilitate the application of something.
- (C) To initiate an investigation of something.
- (D) To reach an agreement on something.

52. Which of the following slogans the residents and civil society groups may chant if they hold a demonstration against the legislation passed by the Dutch parliament?



第53.至56.題為題組

The death of the former England striker Jeff Astle from degenerative brain disease in 2002 placed the spotlight on the possibility of a link between soccer heading and the risk of dementia. The coroner eventually ruled that Astle, 59, died from an “industrial disease” brought on by the repeated traumas of headers, and a later examination of Astle’s brain appeared to bear out this conclusion.

There was scarce scientific data on the issue at that time, but since then the evidence has steadily tipped further in favor of a link—even a single concussion can have lifelong consequences. A 2016 study based on the health records of over 100,000 people in Sweden found that after a single diagnosed concussion, people were more likely to have mental health problems and less likely to graduate from schools. In 2017, researchers from University College London examined postmortem the brains of six former soccer players who had developed dementia and then found signs of brain injury in four cases. Last year, a study by a team at Glasgow University found that more than 7,000 former professional soccer players were three and a half times more prone to die from dementia and other serious neurological diseases.

However, which element of soccer is responsible for the link? According to the further study by Prof Michael Grey, a leader in a project on the association between soccer and dementia at the University of East Anglia, heading the ball repetitively is the most obvious cause of these sub-concussive injuries. Lately, Craig Ritchie, a professor of the psychiatry of aging at the University of Edinburgh, along with his team, is hoping to track 100 ex-professional soccer players, 100 ex-rugby players, and hundreds of members of the public. The team will give the subjects detailed brain scans, administer cognitive tests, and collect samples of cerebral spinal fluid over the coming decades.

53. Which of the following describes the order of the author's organization of the first paragraph?

- (A) Examination → Hypothesis → Conclusion → Fact.
- (B) Hypothesis → Examination → Fact → Conclusion.
- (C) Conclusion → Fact → Hypothesis → Examination.
- (D) Fact → Hypothesis → Examination → Conclusion.

54. Read the table below that summarizes the four studies and choose the best answer.

<i>Place</i>	<i>Subject</i>	<i>Method</i>	<i>Finding</i>
Sweden	> 100,000 people	keep track of health records	(A)
(B)	6 former players	examine postmortem the brains	brain injury in four cases
Glasgow	(C)	not mentioned	dying from dementia and other neurological diseases
Edinburgh	100 ex-professional soccer players, 100 ex-rugby players, and hundreds of people	(D)	not mentioned

- (A) Higher possibility of becoming physically-challenged.
- (B) East Anglia.
- (C) Current soccer players.
- (D) Scan brains, collect samples of cerebral spinal fluid and give cognitive tests.

55. How does the author present the studies mentioned in this passage?

- (A) In the order of time.
- (B) By comparison and contrast.
- (C) According to the sample size.
- (D) In the alphabetical order of the names of the universities.

56. What may researchers ask The Football Association to do for the sake of players' health?

- (A) To ban ball heading in training and games.
- (B) To train ball heading at an early age of the players.
- (C) To urge players to buy more life insurance policies.
- (D) To find some counterexamples of the injury in ball heading.

第貳部分：非選擇題（占 28 分）

說明：本部分共有二大題，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），若因字跡潦草、未標示題號、標錯題號等原因，致評閱人員無法清楚辨識，其後果由考生自行承擔。作答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。每題 4 分，共 8 分。

1. 由於社群媒體的便利性，各式各樣的訊息，未經證實就在人與人之間廣為流傳。
2. 因此，除非我們確定訊息正確，否則不應轉傳，以免造成不必要的麻煩。

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：Youtuber 近年來大行其道，許多人紛紛投入這個行業。Youtuber 們根據自己的興趣或專業討論各式各樣的主題。請以此為題，寫一篇英文作文，文長至少 120 個單詞（words）。文分兩段，第一段說明為什麼有這麼多人投入 Youtuber 這個行業；第二段敘述如果你將來要當 Youtuber，你影片討論的主題會是什麼，並說明選擇這個主題的理由。

1. 1998年 12月 15日

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