

大學入學考試中心
102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. Industrial waste must be carefully handled, or it will _____ the public water supply.
(A) contaminate (B) facilitate (C) legitimate (D) manipulate
2. John's vision was direct, concrete and simple and he recorded _____ the incidents of everyday life.
(A) universally (B) scarcely (C) passively (D) faithfully
3. The government cannot find a good reason to _____ its high expenses on weapons, especially when the number of people living in poverty is so high.
(A) abolish (B) escort (C) justify (D) mingle
4. The writing teacher has found that reading fantasies such as J. K. Rowling's *Harry Potter* may inspire her students to think and write with _____.
(A) creativity (B) generosity (C) superstition (D) foundation
5. Since several child _____ cases were reported on the TV news, the public has become more aware of the issue of domestic violence.
(A) blunder (B) abuse (C) essence (D) defect
6. Helen's doctor suggested that she undergo a heart surgery. But she decided to ask for a second _____ from another doctor.
(A) purpose (B) statement (C) opinion (D) excuse
7. All candidates selected after _____ screening will be further invited to an interview, after which the final admission decision will be made.
(A) preliminary (B) affectionate (C) controversial (D) excessive
8. To prevent terrorist attacks, the security guards at the airport check all luggage carefully to see if there are any _____ items or other dangerous objects.
(A) dynamic (B) identical (C) permanent (D) explosive
9. In the desert, a huge mall with art galleries, theaters, and museums will be constructed to _____ visitors from the heat outside.
(A) convert (B) defend (C) shelter (D) vacuum
10. Judge Harris always has good points to make. Her arguments are very _____ as they are based on logic and sound reasoning.
(A) emphatic (B) indifferent (C) dominant (D) persuasive

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

The undersea world isn't as quiet as we thought, according to a New Zealand researcher. Fish can "talk" to each other and make a range of 11 by vibrating their swim bladder, an internal gas-filled organ used as a resonating chamber to produce or receive sound.

Fish are believed to speak to each other for a number of reasons, such as to attract mates, scare off predators, or give directions to other fish. Damsel fish, for example, have been found to make sounds to scare off 12 fish and even divers. Another discovery about fish sounds is that not all fish are 13 "talkative." Some species talk a lot, while others don't. The gurnard species has a wide vocal repertoire and keeps up a constant chatter. Codfish, 14, usually keep silent, except when they are laying eggs. Any goldfish lover who hopes to strike up a conversation with their pet goldfish is 15. Goldfish have excellent hearing, but they don't make any sound whatsoever. Their excellent hearing isn't associated with vocalization.

- | | | | |
|----------------------|----------------------|--------------------|-----------------------|
| 11. (A) choices | (B) objects | (C) accents | (D) noises |
| 12. (A) threatened | (B) being threatened | (C) threatening | (D) being threatening |
| 13. (A) merely | (B) equally | (C) officially | (D) favorably |
| 14. (A) by all means | (B) for example | (C) as a result | (D) on the other hand |
| 15. (A) out of luck | (B) in the dark | (C) off the record | (D) on the rise |

第 16 至 20 題為題組

The U.S. Postal Service has been struggling financially for some time. It plans to stop delivering mail on Saturdays, 16 Aug. 1 this year. This decision was announced on Wednesday without congressional approval. 17 forbidden to do so by the Congress, the agency for the first time will deliver mail only Monday through Friday. It is expected that this 18 will save about \$2 billion a year. In recent years, the postal service has suffered tens of billions of dollars in losses 19 the increasing popularity of the Internet and e-commerce. The postal service plans to continue Saturday delivery of packages, which remain a profitable and growing part of the delivery business. Post offices would remain open on Saturdays 20 customers can drop off mail or packages, buy postage stamps, or access their post office boxes. But hours would likely be reduced at thousands of smaller locations.

- | | | | |
|-----------------|----------------|--------------|----------------|
| 16. (A) starts | (B) started | (C) starting | (D) to start |
| 17. (A) When | (B) Unless | (C) Once | (D) Lest |
| 18. (A) move | (B) round | (C) chance | (D) fact |
| 19. (A) at | (B) with | (C) under | (D) between |
| 20. (A) so that | (B) as soon as | (C) in case | (D) ever since |

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

People who want to experience an overnight stay in arctic-like cold may try the ice hotel—a building of frozen water. Despite the seemingly unattractive prospect of sleeping in a room at minus 15 degrees Celsius, every year about 4,000 people 21 to an ice hotel in a town in Canada.

The only warm things at the ice hotel are the candles on the bedside tables. The air is so cold that you can see your 22, which turns to liquid and appears as tiny droplets at the opening of your sleeping bag. The tip of your nose feels numb—almost as though it were 23. Getting up for a little while—to drink a glass of water or go to the bathroom—seems 24 without risking death.

Since an adventurous spirit alone is not enough to 25 more than two hours at the icy hotel, the staff briefs guests on what to wear and how to behave. Normal winter boots and outfits 26 little protection from the cold. The guests also learn how to 27 quickly in their arctic sleeping bags and how to prevent eyeglasses from freezing.

For individuals who need to escape the cold for a brief period, there are outdoor hot tubs in the hotel courtyard. You should make sure you have stopped sweating before you go to bed, though, because any 28 freezes immediately. Guests who are not 29 can quickly get cold feet and a blocked nose.

Comfort, however, is not the 30 to stay in the ice hotel. Guests want to feel like polar explorers. For them, the first hot cup of post-expedition coffee is pure delight.

- (A) breath (B) careful (C) check in (D) deposit (E) frozen (F) impossible
(G) moisture (H) offer (I) purpose (J) sufficient (K) warm up (L) withstand

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

In the Dutch colonial town later known as Albany, New York, there lived a baker, Van Amsterdam, who was as honest as he could be. He took great care to give his customers exactly what they paid for—not more and not less.

One Saint Nicholas Day morning, when the baker was just ready for business, the door of his shop flew open. 31 She asked for a dozen of the baker's Saint Nicholas cookies. Van Amsterdam counted out twelve cookies. But the woman insisted that a dozen is thirteen. Van Amsterdam was not a man to bear foolishness. He refused. The woman turned to go without the cookies but she stopped at the door, saying, "Van Amsterdam! However honest you may be, your heart is small and your fist is tight." Then she was gone.

32 His bread rose too high or not at all. His pies were sour or too sweet. His cookies were burnt or doughy. His customers soon noticed the difference and slipped away.

A year passed. The baker grew poorer and poorer. Finally, on the day before Saint Nicholas Day, no customer came to his shop. 33

That night, the baker had a dream. He saw Saint Nicholas pulling out gifts from his baskets for a crowd of happy children. No matter how many presents Nicholas handed out, there were always more to give. Then somehow, Saint Nicholas turned into the old woman with the long black shawl!

34 He suddenly realized that he always gave his customers exactly what they paid for, "But why not give more?"

The next morning, on Saint Nicholas Day, the baker rose early to make cookies. And to his surprise, the cookies were as fine as they could be. When he had just finished, the old woman appeared at his door again. She asked for a dozen of Van Amsterdam's Saint Nicholas cookies. 35

When people heard he counted thirteen as a dozen, he had more customers than ever and became wealthy. The practice then spread to other towns as a common custom.

- (A) Van Amsterdam awoke with a start.
(B) In walked an old woman wrapped in a long black shawl.
(C) The more he took from the baskets, the more they seemed to hold.
(D) From that day, everything went wrong in Van Amsterdam's bakery.
(E) In great excitement, Van Amsterdam counted out twelve cookies—and one more.
(F) Staring at his unsold Saint Nicholas cookies, he prayed that Saint Nicholas could help him.

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

All pop artists like to say that they owe their success to their fans. In the case of British band SVM, it's indeed true. The band is currently recording songs because 358 fans contributed the £100,000 needed for the project. The arrangement came via MMC, an online record label that uses Web-based, social-network-style "crowd-funding" to finance its acts.

Here's how it works: MMC posts demos and videos of 10 artists on its website, and users are invited to invest from £10 to £1,000 in the ones they most enjoy or think are most likely to become popular. Once an act reaches £100,000, the financing process is completed, and the money is used to pay for recording and possibly a concert tour. Profits from resulting music sales, concerts, and merchandise are split three ways: investors get to divide 40%; another 40% goes to MMC; the artist pockets 20%. The payoff for investors can be big. One fan in France who contributed £4,250 got his money back 22 times over.

Crowd-funding musical acts is not new. But MMC takes the concept to another level. First of all, investors can get cash rather than just goodies like free downloads or tickets. Also, MMC is a record label. It has the means to get its music distributed around the world and to market artists effectively. "Artists need professional support," says the CEO of MMC's international division.

While digital technology and the Net have created a do-it-yourself boom among musicians, **success is still a long shot**. Out of the 20,000 records released in the U.S. in 2009, only 14 DIY acts made it to the Top 200. Also, with less revenue from recorded music, music companies have become less likely to take risks, which has led to fewer artists receiving funding. The crowd-funding model, however, allows for more records to be made by spreading risk among hundreds of backers. And the social-network aspect of the site helps expand fan bases; that is, investors become a promotional army.

36. Which of the following titles best expresses the main idea of the passage?

- (A) Web-based Music Production
- (B) Fundraising for Music Companies
- (C) Music Fans Profiting from Investments
- (D) Crowd-funding in the Music Industry

37. How much money does a band have to raise via MMC to have their music recorded?

- (A) £10. (B) £1,000. (C) £4,250. (D) £100,000.

38. Which of the following statements is true about MMC?

- (A) It has helped many do-it-yourself musicians get to the Top 200.
- (B) There are works of fourteen artists posted at a time on its website.
- (C) It allows fans to provide financial support to the musicians they like.
- (D) The biggest share of its profits from a crowd-funding project goes to the musician.

39. What does the author mean by **success is still a long shot** in the fourth paragraph?

- (A) Success is everlasting in effect.
- (B) Success is not easy to achieve.
- (C) Success often starts with one big shot.
- (D) Success should be every musician's long-term goal.

第 40 至 43 題為題組

In science fiction TV programs such as Star Trek, tractor beams are used to tow spaceships and move objects. For years, scientists have labored to replicate this feat. In 2013, they succeeded. A team of British and Czech scientists, led by Dr. Tomas Cizmar, say they have created a real-life “tractor beam,” like the kind from Star Trek, which uses a beam of light to attract objects, at least at a microscopic level.

Light manipulation techniques have existed since the 1970s, but this is thought to be the first time a light beam has been used to draw objects towards a light source. Usually when microscopic objects are hit by a beam of light, they are forced along the direction of the beam. After many years’ research, Dr. Cizmar’s team discovered a technique that allows for the radiant force of light to be reversed and to use the negative force to draw out certain particles.

Dr. Cizmar says that even though it is a few years away from practical use, the technology has huge potential for medical research. In particular, the tractor beam is highly selective in the particles it can attract, so it can pick up particles that have specific properties, such as size or composition, in a mixture. “Eventually, this could be used to separate white blood cells, for example,” Dr. Cizmar told BBC News.

It has been a primary plot device in science fiction TV programs and movies to allow objects like spaceships to be trapped in a beam of light. But Dr. Cizmar said this particular technique would not eventually lead to that. A transfer of energy happens in the process. On a microscopic scale that is OK, but on a large scale it would cause huge problems. A large object could be destroyed by the heating, which results from the massive amount of energy necessary to pull it.

40. What is this passage mainly about?

- (A) The application of lighting technology in modern society.
- (B) The uses and limitations of a scientific invention by a research team.
- (C) The adoption of light manipulation techniques in medical treatment.
- (D) The influences and effects of scientific developments on science fiction.

41. Which of the following is true about Dr. Cizmar’s tractor beam?

- (A) It moves big objects as the tractor beam did in Star Trek.
- (B) It is the first light beam device that pushes objects forward.
- (C) It relies on negative force to pull out specific kinds of particles.
- (D) It is currently being used for separating blood cells in medical research.

42. What does that in the last paragraph refer to?

- (A) Transferring a massive amount of energy.
- (B) Making science fiction programs and movies.
- (C) Burning a large object into ashes.
- (D) Capturing spaceships in a beam of light.

43. What is the tone of this passage?

- (A) Objective. (B) Suspicious. (C) Admiring. (D) Pessimistic.

第 44 至 47 題為題組

Grace Wambui, a 14-year-old pupil in Nairobi, had never touched a tablet computer. But it took her only about one minute to work out how to use one when such devices arrived at Amaf School in Kawangware, a slum in the Kenyan capital. Teaching used to be conducted with a blackboard and a handful of tattered textbooks. Now children in groups of five take turns to swipe the touch screen of the devices, which are loaded with a multimedia version of Kenya’s syllabus.

The tablets at Amaf School are part of a pilot project run by eLimu, a technology start-up. If it and other firms are right, tablets and other digital devices may soon be the rule in African schools. Many are betting on a boom in digital education in Kenya and elsewhere. Some executives even expect it to take off like M-Pesa, Kenya’s hugely successful mobile-money service.

Such growth in digital education would be timely. The flood of new pupils has overwhelmed state schools, which were already understaffed, underfunded and poorly managed. The prospect of Africa's 300 million pupils learning digitally has caught the attention of global technology giants. Amazon has seen sales of its Kindle e-readers in Africa increase tenfold in the past year. Intel has been helping African governments buy entry-level computers. In Nigeria, Intel brought together a publisher and a telecom carrier to provide exam-preparation tools over mobile phones, a service that has become hugely popular.

A bigger question is whether digital tools actually improve education. Early results are encouraging. In Ghana, reading skills improved measurably among 350 children that had been given Kindle e-readers. In Ethiopia, in the absence of teachers, children figured out how to use tablets and learned the English ABCs. At Amaf School, average marks in science went from 58 to 73 in a single term.

44. Which of the following is the best title for this passage?

- (A) The Bestseller in Africa
- (B) Problems Plaguing Education in Africa
- (C) Schools in Africa Are Going Digital
- (D) Tablet Computers Are in Great Demand in Kenya

45. What is the author trying to convey in citing Grace Wambui's case?

- (A) Grace is a genius in computer skills.
- (B) The tablet computer is very user-friendly.
- (C) The delivery system in Kenya is very poor.
- (D) Tablet computers are common in Kawangware.

46. According to the passage, what is eLimu?

- (A) A company.
- (B) A computer program.
- (C) An e-book.
- (D) An educational project.

47. According to the passage, which of the following is true about education in Africa?

- (A) The number of students keeps dropping in recent years.
- (B) There are more than enough teachers for traditional classroom teaching.
- (C) Students have received Kindle e-readers donated by Amazon to improve reading.
- (D) Early results from use of digital tools in teaching are quite positive in some countries.

第 48 至 51 題為題組

In the Spartathlon, one of the world's toughest ultra-marathons, runners run 245 km, about six marathons, within 36 hours. The runners start in Athens, and run all the way to historical Sparta.

The Spartathlon's heritage goes back to 490 B.C., when Pheidippides, an Athenian, made the journey to Sparta to ask the Spartans for help in fighting the invading Persians. It is recorded that he reached Sparta on the day after he left Athens. In 1982, this story sparked the interest of a British air-force officer and long-distance runner called John Foden, who wondered if it really was possible to run from Athens to Sparta and arrive the next day. With four other officers, Foden decided to see for himself; after a 36-hour slog they arrived in Sparta, as the town is now called. That achievement inspired the organization of the first Spartathlon a year later.

The Spartathlon's attraction has two sources. The first is the difficulty of finishing it. The Spartathlon is not the most difficult race, but it combines lots of different tests. There is the heat of the Greek day, and then the plunge in temperatures when darkness falls. There are climbs: the route includes a series of ascents, among them a 1,200-meter mountain pass in the dead of night. Above all, there is the relentless pressure of the clock. The second reason is that the idea of retracing Pheidippides's footsteps still grips many participants. It feels like racing in history, passing through places where history began.

As finishers receive a laurel wreath and water from schoolgirls, many are overjoyed with emotion. However, **the euphoria is fleeting**. Within a few minutes, their joints and muscles start to seize up: after the race, Sparti resembles the set of a zombie film as participants lumber slowly around on legs that will not bend. But the itch to do it all over again soon appears.

48. What is the second paragraph mainly about?
- (A) The background of John Foden. (B) The route of an ultra-marathon.
(C) The origin of the Spartathlon. (D) The story of Pheidippides in ancient Athens.
49. Why do ultra-runners choose the Spartathlon?
- (A) It is the most classical ultra-marathon in the world.
(B) Runners feel like racing through history.
(C) Their personal problems will be solved in the race.
(D) They have to finish all the tests in one day.
50. What does **the euphoria is fleeting** in the last paragraph mean?
- (A) The feeling of triumph will last forever.
(B) The race is incomprehensibly difficult to finish.
(C) The fatigue after the race is overwhelming.
(D) The excitement of finishing the race is soon gone.
51. According to the passage, which of the following statements is true about the Spartathlon?
- (A) The Spartathlon was first organized in 1983.
(B) The event of the Spartathlon was made into a movie.
(C) After completing the race, many decide not to try it again.
(D) The runners have to endure high temperature day and night.

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。

- 對現今的許多學生而言，在課業與課外活動間取得平衡是一大挑戰。
- 有效的時間管理是每位有責任感的學生必須學習的首要課題。

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：以下有兩項即將上市之新科技產品：

產品一：隱形披風
(invisibility cloak)



穿上後頓時隱形，旁人看不到你的存在；同時，隱形披風會保護你，讓你水火不侵。

產品二：智慧型眼鏡
(smart glasses)



具有掃描透視功能，戴上後即能看到障礙物後方的生物；同時能完整紀錄你所經歷過的場景。

如果你有機會獲贈其中一項產品，你會選擇哪一項？請以此為主題，寫一篇至少 120 個單詞的英文作文。文分兩段，第一段說明你的選擇及理由，並舉例說明你將如何使用這項產品。第二段說明你不選擇另一項產品的理由及該項產品可能衍生的問題。