

107 學年度中區縣市政府教師甄選策略聯盟

【科目名稱：英語(新竹市專用)】

選擇題（請以 2B 鉛筆於答案卡上作答，單選題；答錯不倒扣）每題 2 分，共 100 分

I. Vocabulary and Expression: Choose the best answer to each question.

1. The Mainland Affairs Council said that Taiwan supports the freedom of _____ for journalists from China but will not tolerate the spread of fake news.
(A) push (B) voting (C) press (D) surge
2. Banh mi sandwiches are a well-known taste in Vietnam that _____ the traditional local flavors of the nation with its French heritage.
(A) rumbles (B) combines (C) accelerates (D) distinguishes
3. In spring, mangoes are plentiful in the markets of Thailand and the _____ for mango cuisines is high. Those who pay a visit to Thailand are advised to take a bite.
(A) denial (B) disgust (C) demand (D) decision
4. Though _____ for its corruption of administration, the tournament in Russia celebrates internationalism and liberalism during the season of World Cup.
(A) populous (B) notorious (C) nutritious (D) courageous
5. The president is said to _____ the international order and violate the global consensus. The legislators have taken steps to dig out the truth.
(A) undergo (B) undermine (C) understand (D) underestimate
6. The government of Argentina managed to make elective abortion legal in the hope of saving more _____ women's life and preserving their health.
(A) liberal (B) pregnant (C) mournful (D) metropolitan
7. When exercising, many people consume _____ of beverages, such as sports drinks, energy drinks, and low-calorie drinks.
(A) flocks (B) species (C) varieties (D) swarms
8. After the historic appointment of Kim with President Trump, the administration of North Korea announced that they'd desert all of the _____, not just the nukes.
(A) weapons (B) prisoners (C) peninsulas (D) recessions
9. The Indian Prime Minister has been an active _____ of yoga in an attempt to promote this traditional exercise at home and abroad.
(A) opponent (B) challenger (C) proponent (D) contender
10. In the movie of the Jurassic World, the former park manager Claire Dearing came to discover a _____ that could destroy the natural order of the planet while saving the last few dinosaurs.
(A) publicity (B) ingenuity (C) conspiracy (D) bureaucracy
11. The conservative party participated in a debate on the _____ of capitalism, and surprisingly, they were convinced of the benefits of free market.
(A) dos and don'ts (B) pros and cons (C) ups and downs (D) ebbs and flows
12. A small-sized heater is considered convenient and effective for its direct heat to a room, but it can also _____ our house. For example, a fire risk is very likely to exist.
(A) pose a threat to (B) take an adventure of (C) make a difference over (D) have nothing to do with
13. Recently divorced, our neighbor downloaded an app of online dating _____ new and true love. However, no one believed he'd find an ideal mate from the virtual world.
(A) in search of (B) in addition to (C) in supply for (D) in accordance with
14. A: Stop playing the video games on your computer all day long!
B: Come on, it is just the start of our summer vacation.
A: Alright, I'll leave you alone, if you choose to be a _____.
(A) hot potato (B) baked potato (C) sweet potato (D) mouse potato
15. A: Wow, it finally comes to the day of our trip.
B: Yes, I am so excited now. _____.
A: Sure, the bus will be coming in 30 minutes.
(A) Let's hit the road.
(B) It's all Greek to me.
(C) You are the apple of my eye.
(D) Don't put all your eggs in a basket.

II. Grammar: Choose the best answer to each question.

16. In spite of the fast development of technology, machines should be designed to make people work _____ instead of replacing them.
(A) less productive (B) more productive (C) more productively (D) less productively
17. An African-centered academy is teaching children the great history of the pre-colonial kingdoms rather than the melancholy history of slavery as if that _____ their first start into history.
(A) be (B) are (C) been (D) were
18. _____ strike a balance between the advantages of high-tech advancement and its disadvantages is still a question unanswered.
(A) What (B) How to (C) Wherever (D) No matter when
19. _____ in the pond, a crowd of hippos which used to live there were forced to move to a new place.
(A) Being no water (B) No water was there (C) There was no water (D) There being no water
20. But for your timely assistance last year, I _____ my goal of earning the first place in the tournament this year.
(A) have not reached (B) had not reached (C) had not been reached (D) would not have reached
21. _____ in paper, the dish of Hainanese chicken and rice is a Singaporean meal and comfort food.
(A) Wraps (B) Wrapped (C) Wrapping (D) Wrappers
22. Candidates are required to take five tests, _____ of Chinese, English, math, natural science and social science.
(A) include (B) included (C) inclusive (D) including
23. _____ I feel discouraged, my teacher always encourages me with positive feedback and concrete advice.
(A) Whoever (B) Whenever (C) Whatever (D) Whichever
24. While it is hard to decide _____ vitamin supplements make users healthier, it is much easier to challenge the idea that more is better.
(A) since (B) whereas (C) although (D) whether
25. Different foods have different _____ of chemical potential energy, which can be released as they are metabolized.
(A) amount (B) number (C) amounts (D) numbers

III. Cloze: Choose the answer that best fits the text.

On a boat off Costa Rica, a biologist uses pliers from a Swiss army knife to try to extract a plastic straw from a sea turtle's nostril. The turtle 26 in agony, bleeding profusely. For eight painful minutes the YouTube video ticks on; it has logged more than 20 million 27, even though it's so hard to watch. At the end the increasingly desperate biologists finally manage to dislodge a four-inch-long straw from the creature's nose. Raw scenes like this, 28 bare the toll of plastic on wildlife, have become familiar: The dead albatross, its stomach bursting with refuse. The turtle stuck in a six-pack ring, its shell warped from years of straining against the tough plastic. The seal snared in a 29 fishing net. But most of the time, the harm is stealthier. Flesh-footed shearwaters, large, sooty brown seabirds that nest on islands off the coasts of Australia and New Zealand, eat more plastic as a proportion of their body mass than 30 marine animal, researchers say: In one large population, 90 percent of the fledglings had already ingested some. A plastic shard piercing an intestine can kill a bird quickly.

26. (A) besieges (B) writhes (C) jeopardizes (D) merchandizes
27. (A) views (B) versions (C) vaccines (D) veterinarians
28. (A) lay (B) laid (C) lying (D) which lay
29. (A) renowned (B) scheduled (C) discarded (D) intimidated
30. (A) any other (B) some of other (C) most of the (D) all the other

Radiologists, say the pessimists, will be first against the wall when the machines take over. Analyzing medical images is a natural fit for "deep learning", an artificial-intelligence (AI) technique which first attracted 31 for its ability to teach computers to recognize objects in pictures. A variety of companies hope that 32 AI 32 the clinic will make diagnosis faster and cheaper. The machines may even be able to see nuances that humans cannot, assessing 33 risky a patient's cancer is simply by looking at a scan. Some AI researchers think that human beings can be dispensed with entirely. "It's quite obvious that we should stop training radiologists," said Geoffrey Hinton, an AI luminary, in 2016. In November Andrew Ng, another superstar researcher, when discussing AI's ability to 34 pneumonia from chest x-rays, wondered "whether radiologists should be worried about their jobs". 35 how widely applicable machine learning seems to be, such pronouncements are bound to alarm white-collar workers, from engineers to lawyers. The application of AI to professions suggests a new story to be told in the foreseeable future.

- | | | | |
|-------------------------------|------------------------|--------------------------|-------------------------|
| 31. (A) attention | (B) intonation | (C) separation | (D) medication |
| 32. (A) preventing... from... | (B) combing... with... | (C) nominating... for... | (D) bringing... into... |
| 33. (A) how | (B) what | (C) when | (D) where |
| 34. (A) operate | (B) separate | (C) diagnose | (D) naturalize |
| 35. (A) Since | (B) Given | (C) Namely | (D) Therefore |

Students who are best prepared for the future can face upcoming challenges with ease. They can have a positive 36 on their surroundings, influence the future, understand others' intentions, actions and feelings, and anticipate the short and long-term consequences of what they do. The concept of competency implies 37 just the acquisition of knowledge and skills; it also involves the mobilization of knowledge, skills, attitudes and values to meet complex demands. Future-ready students will need 38 broad 38 specialized knowledge. Disciplinary knowledge will continue to be important, together with the capacity to think across the boundaries of disciplines and “connect the dots.” Epistemic knowledge, or knowledge about the disciplines, such as knowing how to think like a mathematician, historian or scientist, will also be significant, 39 students to extend their disciplinary knowledge. Procedural knowledge is acquired by understanding how something is done or made – the series of steps or actions 40 to accomplish a goal. Some procedural knowledge is domain-specific, some transferable across domains. It typically develops through practical problem-solving, such as through design thinking and system thinking.

- | | | | |
|------------------------|---------------------|-----------------------|-------------------|
| 36. (A) launch | (B) content | (C) impact | (D) revolution |
| 37. (A) more than | (B) less than | (C) at most | (D) no more than |
| 38. (A) both... and... | (B) either... or... | (C) neither... nor... | (D) not... but... |
| 39. (A) able | (B) unable | (C) ability | (D) enabling |
| 40. (A) take | (B) takes | (C) taken | (D) taking |

IV. Reading Comprehension: Choose the best answer to each question.

In July 1969, the world watched as two men set foot on the Moon. For the first time, humanity had ventured out of the planet and touched the possibility of worlds beyond. But our space travel ambitions seem to have stalled since the 1970s and 1980s. In over 30 years, we've ventured virtually no further than the original pioneers. And as more astronauts have spent more time aboard the various space stations, they have reported worrying health problems.

As recent tragic events have shown, the most dangerous part of any space journey is taking off. Trying to reach the speeds needed to escape Earth's gravity is fraught with peril. But even once they reach space, astronauts are not out of danger. Instead, they are exposed to a new set of risks which we are only just beginning to understand.

Astronaut Chris Hadfield spent months living in space aboard the International Space Station. According to Hadfield, zero gravity changed his body and how he lived with the constant threat of high-speed micrometeorites.

We were made to live on Earth, not in the extreme conditions we find in space. So when astronauts like Chris Hadfield leave our planet, they have to take their environment with them. That's why they wear specially-designed spacesuits. But spacesuits do much more than just keep Earth's atmosphere around astronauts. Over the years, spacesuit design has evolved to protect humans from the harshness of space.

In Earth's orbit, astronauts might experience temperatures as low as -129°C (-200°F) and as high as 121°C (250°F). Spacesuits have been cleverly designed to protect us from these extreme conditions. They also provide air pressure to prevent our bodily fluids from boiling in the hard vacuum of space. But astronauts can only travel so far in the spacesuits that exist today. Even our best suits are limited to a ‘low-Earth orbit’. To push farther into the Solar System, we will need a new suit – one that will shield us from the lethal hazards of deep space. But even then, are we sturdy enough to survive a long mission?

A spacesuit may protect us externally, but space can have devastating effects on the internal workings of the human body. On Earth, we have evolved to work in harness with gravity. Our muscles and bones have developed to expect this force and **it** is needed to keep them strong and healthy. In space, astronauts float weightlessly. This looks like a lot of fun, but prolonged exposure to a microgravity environment can have insidious effects on the human body.

Space travel plays havoc with our blood circulation. Human cardiovascular systems are designed to pump blood steadily around the body against the force of gravity, which normally pulls blood towards our feet. But in the microgravity of space, blood moves up to the chest and head, giving astronauts puffy faces and raised blood pressure.

Muscles are also threatened by space travel. Without the need to work against gravity, muscles can start to waste, which increases the risk of tendonitis and fat accumulation. The lack of gravity even makes astronauts stand up to two inches taller, as back vertebrae separate without the compression of gravity, leading to painful back-aches.

Over the long term, astronauts suffer the devastating consequences of bone loss. Microgravity causes the body to lose calcium and phosphorus, leading to a gradual weakening of bone and an increased risk of **osteoporosis**. Bone loss can be as high as 1.5% of its mass per month, which is roughly 10% over a six-month stay in space, with the recovery after returning to Earth taking at least three to four years. In an attempt to combat this, astronauts living on the International Space Station must carry out 2.5 hours of exercise a day, six times a week.

41. **Osteoporosis** refers to the _____.
- (A) bone loss
 - (B) slow growth
 - (C) weight problem
 - (D) blood pressure
42. In the sixth paragraph, “Our muscles and bones have developed to expect this force and **it** is needed to keep them strong and healthy.” What does the word **it** refer to?
- (A) Earth.
 - (B) Gravity.
 - (C) A spacesuit.
 - (D) A spaceship.
43. What can be inferred from the passage?
- (A) The innovation of new spacesuits has made the long mission into the deep space possible.
 - (B) The astronauts should be as static as possible in space to avoid the gradual waste of muscles.
 - (C) Without gravity, the vertebrae will naturally expand slightly, causing a person to become taller.
 - (D) Travel outside of Earth’s protective magnetic shield is irrelevant to the risk of heart disease deaths among the astronauts.
44. According to the passage, which of the following statements is **incorrect**?
- (A) The long-term exposure to low-gravity environment might have adverse effects on the body.
 - (B) There has been dramatic breakthrough in technologies that operate in space travel since 1969.
 - (C) A spacesuit is a specially designed garment to keep human alive by keeping a body in a liquid state.
 - (D) After spending months or years in space during long-term space missions, return to Earth can be challenging to astronauts.
45. What is the most appropriate title to the passage?
- (A) What is an astronaut’s daily life like?
 - (B) Why to develop future space missions?
 - (C) What makes space travels so dangerous?
 - (D) What do we learn from history of space travel?

The development of lacquer as a medium for the artist is one of the most significant achievements in the art world of 20th century Vietnam. Although China produced lacquered folding screens with landscape and traditional decorative imagery, a medium for the artist lacquer did not hold appeal. This also seems to have been the case in those other countries that have a traditional production of lacquer handicraft. Thus, it was only in Vietnam that the artist turned to lacquer. Those artists in the forefront of this nascence nurtured the dream that this would be a medium in which Vietnam would excel, and which they could claim as their own. These aspirations can be seen as a product of the twin stirrings of nationalism and modernization. Seventy years have now passed, and those pioneer artists are dead. The Fine Arts Museums of Vietnam, Hanoi in particular and to a lesser extent Ho Chi Minh City, have a bracket of representative lacquer paintings from this early period. Apart from a relatively small circle of connoisseurs, the genre is not well-known outside Vietnam.

One should note that the translation “lacquer painting” might be misleading. Although the artist applies the lacquer paint with a brush, the essence of a lacquer painting depends upon the artist’s skill in rubbing or burnishing the lacquer to reveal the image beneath. The Vietnamese Son Mai (grinding paint) accurately describes the process. Unfortunately, in English there is no equivalent term.

That lacquer painting is such a recent development and confined to Vietnam, may seem remarkable in view of the fact that since ancient times, lacquer has been used to embellish religious and household objects. Recent archaeological discoveries also show lacquer had been used in Vietnam for several thousand years. So lacquer as a medium for the last seventy years has been nurtured with diligence and pride. Lacquer is a difficult and time-consuming medium and to turn out a single painting may require years of work.

The use of the medium by artists has originated in the north since the second quarter of the 20th century. That it occurred at this time is not a coincidence. It is allied to the spread of modern technology, the growth of a market economy, and wider opportunities for Vietnam to access education and to travel overseas. In 1930, a huge increase in the publication of newspapers, books and magazines in Quoc ngu (Romanized script), brought a new literature much of it to focusing on a debate over certain issues, such as tradition versus change. The impact of these developments was most felt in urban centers. In Hanoi, there was a trend to westernize and to modernize. Without any surprise, it was in Hanoi that artists first turned to lacquer as a medium to express their perceptions of current developments.

It was during this period that the Indochina Fine Arts College was established in Hanoi in 1925. The school was founded on the initiative of the French artist Victor Tardieu with the first students graduating in 1930. Students were instructed in the European style of painting. But in addition to offering instruction in oil painting, students were also encouraged to experiment with traditional mediums such as lacquer and silk. This was the first time a program of formal instruction of this nature had been available outside the traditional guild system. This environment ushered in changes to the ancient tradition of lacquer handicrafts. New techniques, colors, production processes and ideas about the use of space brought changes in perception that also opened a window to the possibilities lacquer offered as a medium for the artists. The time was ripe and the talented young artists of the day enthusiastically seized the opportunity to use lacquer in this new way.

In 1932, lacquer used on a painting of student Tran Van Can was mixed with pine resin rather than the traditionally used flat tree oil. This combination was more effective in holding the coating of lacquer and also the colors, and when the surface was burnished, the image revealed itself with greater clarity. This discovery is said to mark the turning point in the use of lacquer as a medium for the artist. It further stimulated new ideas among artists who committed themselves to the new medium.

46. What is the Vietnamese original term for lacquer painting?
- (A) Hanoi
 - (B) Quoc ngu
 - (C) Song Mai
 - (D) Tran Van Can
47. Which of the following statements about Vietnamese lacquer painting is **incorrect**?
- (A) The artist will rub and polish up the images in the painting.
 - (B) The use of lacquer as a medium of art expression flourished in China.
 - (C) Vietnamese lacquer art is extremely time-consuming and labor-intensive work.
 - (D) Lacquer was used to enhance the beauty of household objects in the past in Vietnam.
48. What can be inferred from the passage?
- (A) The use of pine resin destroys the original flavor of lacquer painting.
 - (B) Lacquer painting signifies national and cultural pride for the Vietnamese.
 - (C) The French colonization had a damaging effect on the conservation of lacquer art.
 - (D) The Vietnamese lacquer painting has its high popularity and fame all over the world.
49. Why was there no surprise to see the artists in Hanoi take the initiatives to express their thoughts through the medium of lacquer?
- (A) The heritage of Chinese culture had a strong impact on the residents in the city.
 - (B) The artists in Hanoi insisted on preserving the traditional method of making lacquer painting.
 - (C) The residents living in the city were not open to the ideas of Westernization and modernization.
 - (D) The influence of a new literature on the cultural developments spread more prevalently in the urban area.
50. Which of the following statements about the Indochina Fine Arts College is correct?
- (A) The use of new mediums to create new artworks was prohibited.
 - (B) The French artist Victor Tardieu was one of the founders of the school.
 - (C) The teaching of lacquer painting was only available in traditional workshops.
 - (D) The Vietnamese student Tran Van Can failed to mark a new era of lacquer painting.