

中正國防幹部預備學校
107 年教師甄選測驗試題

英文考科

—作答注意事項—

考試時間：100 分鐘

題型題數：

- 第一部分 選擇題共 50 題
- 第二部分 非選擇題共 2 題

作答方式：

1. 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）
2. 非選擇題用黑色或藍色原子筆在「答案卷」上作答，更正時，可以使用修正液（帶）
3. 未依規定劃記答案卡，致機器掃描無法辨識答案，其後果由考生自行負擔
4. 答案卡及答案卷每人一張，不得要求增補
5. 考試結束後，試卷、答案卡、答案卷須一併繳回

第一部分、選擇題 60%

I. Vocabulary 10%

1. Kim Jong Un, who went off script, urged Moon Jae-in to cross the Military _____ Line onto his turf.
(A) Imprecation (B) Repercussion (C) Opprobrium (D) Demarcation
2. Fancy restaurants tend to use _____ lighting to create a romantic atmosphere.
(A) lugubrious (B) subdued (C) perennial (D) negotiable
3. Mom sewed the jacket so _____ that one could hardly see the stitches.
(A) fervently (B) peripherally (C) meticulously (D) sluggishly
4. Malala Yousafzai is an activist who _____ girls' education.
(A) deprecates (B) champions (C) traumatizes (D) infatuates
5. Kirkuk is home to massive oil reserves; it's also been an era of contention since the Kurds voted unanimously for independence in a(n) _____.
(A) referendum (B) ordinance (C) plutocracy (D) synopsis
6. Good teachers ought to _____ the importance of good study habits in their students.
(A) begrudge (B) extirpate (C) germinate (D) inculcate
7. The World Health Organization classified radio-frequency electromagnetic fields as possibly _____ to humans.
(A) carcinogenic (B) minuscule (C) overwrought (D) obsequious
8. Edwin started plotting a scheme to _____ himself to greatness.
(A) perpetuate (B) palliate (C) catapult (D) foment
9. The quiet old library was not merely a place for people to do some readings; it was also a(n) _____ from the hateful noise and pressure of the world outside.
(A) epitome (B) sanctuary (C) pandemonium (D) denouement
10. Amazon Go is a forerunner of cashierless stores and thus has been a _____ opponent to other businesses.
(A) virulent (B) tantamount (C) formidable (D) whimsical

II. Cloze 15%

In the Bahamas, there is a special island. It is officially named Big Major Cay but it is commonly __11__ Pig Beach. On this small, thickly forested speck of land, pigs swim in the surrounding crystal-clear waters and interact with tourists in hopes of getting a free bite to eat.

For a long time, rumors spread about how the pigs had gotten to this island. Tales range from a crashed ship with the pigs being the only known __12__ to being the forgotten meal of a crew of sailors. In the end, the truth eventually __13__. It was discovered that the pigs had been brought to the island by a couple preparing for the supposed meltdown of civilization in the year 2000.

Tourists have been enjoying spending time with the pigs ever since their discovery. They would take pictures with the pigs, pet them, and feed them food. The popular performer Pitbull even filmed portions of the music video for his single “Timber” on Pig Beach. Many different media outlets have featured the pigs, and their home is one of the most famous destinations in the Bahamian islands.

__14__ the majority of people treat the pigs with respect, unfortunately, this wasn’t always the case. People have __15__ fed them alcohol and other things that are dangerous to their health. It is believed that this recently caused the death of seven or eight of the pigs.

__16__, the government of the Bahamas now bans tourists from feeding the pigs. Some wish to extend restrictions even further by implementing a(n) __17__ distance that tourists must keep from the pigs. While these restrictions are not yet enacted, if people continue to abuse these animals, more rules are likely to follow. The death of these pigs serves as an unfortunate reminder that even when we travel, we still need to act responsibly. When this is forgotten, everyone suffers the consequences.

- 11. (A) nominated (B) condemned (C) announced (D) dubbed
- 12. (A) survivors (B) sacrifices (C) participants (D) aborigines
- 13. (A) reached its peak (B) broke down (C) came to light (D) loomed on the horizon
- 14. (A) Since (B) If (C) When (D) Whereas
- 15. (A) automatically (B) recklessly (C) collectively (D) passively
- 16. (A) In response (B) On the contrary (C) In other words (D) From then on
- 17. (A) flexible (B) invulnerable (C) mandatory (D) expansive

Here’s an idea whose time has come: A flu shot that doesn’t require an actual shot. For the first time, researchers have tested a flu vaccine patch in a human clinical trial and found that it delivered as much protection as a traditional jab with a needle. Doctors and public health experts have high hopes that vaccine patches will boost the number of people who get immunized __18__ the flu.

Seasonal influenza __19__ up to half a million deaths around the world each year, according to the World Health Organization. A team led by Georgia Tech engineer Mark Prausnitz has come up with a(n) __20__ method that uses “microneedles.” These tiny needles are so small that 100 of them, __21__ on a patch, can fit under your thumb. Yet they’re big enough to hold vaccine for three strains of the flu.

None of the study volunteers had serious side effects. The groups that got patches had mild reactions that were not seen in the regular needle group; __22__, the volunteers in the regular needle group were more likely to experience pain. Overall, 70 percent of the volunteers who got vaccine patches said they’d rather use them again than get a traditional flu shot. The study authors declared it a success on all fronts.

These early findings suggest the emergence of a __23__ new option for seasonal vaccination, and the biggest __24__ could be people in low- and middle-income countries,

__25__ flu vaccines are hard to come by. Reducing pain is nice, but other advantages — the patch doesn't generate sharp waste and is easier to transport — are even better.

- | | | | |
|-------------------------|-------------------|-------------------|------------------------|
| 18. (A) from | (B) against | (C) with | (D) beyond |
| 19. (A) pumps out | (B) taps into | (C) is made up of | (D) is responsible for |
| 20. (A) alternative | (B) equivalent | (C) permanent | (D) superstitious |
| 21. (A) array | (B) arraying | (C) arrayed | (D) to be arrayed |
| 22. (A) without a doubt | (B) as a result | (C) in addition | (D) on the other hand |
| 23. (A) catastrophic | (B) luxurious | (C) promising | (D) spontaneous |
| 24. (A) curators | (B) beneficiaries | (C) victims | (D) philanthropists |
| 25. (A) which | (B) that | (C) what | (D) where |

III. Semantic Filling 10%

- | | | | |
|----------------|------------------------|-----------------|------------|
| (A) leeway | (B) are overwhelmed by | (C) loan | (D) while |
| (E) motivating | (F) innovative | (G) subtracting | (H) except |
| (I) landing | (J) are critical of | | |

Students in China face enormous academic pressure. Between studying for tests, doing their homework, and trying to keep their parents and teachers happy, many __ (26) __ the stress and anxiety of their lives. One school in Nanjing has come up with the grade bank — a(n) __ (27) __ way to take some of the strain off what might happen if they fail an exam.

Modeled after a bank __ (28) __, the grade bank lets students borrow points in case they fall below a passing score on a test. The system allows students some __ (29) __, but they also have to pay back the points they borrowed by __ (30) __ them from a future test score. If they don't pay it back in time, they are subject to interest on the points they borrowed. It works just like financial credit, __ (31) __ it is only for students in the school's 10th grade Advanced Placement classes.

Some __ (32) __ the experimental grade bank, which has been operating since November 2016, __ (33) __ others see it as a way to help students feel less stressed out in their academic lives. A single failing grade could ruin their hopes of attending a good university and __ (34) __ their dream job. One student at the school is quoted as saying, "I was sick before the midterm exams and missed several geography classes. I failed the exam, so I am glad the 'grade(s) bank' gave me a chance to fix that." Instead of using fear and intimidation as a __ (35) __ factor to help students succeed in school, the grade bank makes itself sound like a safety that gives students a second chance to do better on a subsequent test.

IV. Discourse 5%

Dyson is a British-based manufacturing company that was established in 1987 by James Dyson. They design and produce a range of household products that includes vacuum cleaners, heaters, hand dryers, hair dryers, and bladeless fans, while employing a workforce of 7,000 worldwide.

__(36)__ While vacuum cleaners had been around for a long time, Dyson was dissatisfied with the way existing vacuum cleaners performed. The bags that trap the dust clogged, causing loss of suction and cleaning power. __(37)__ He had built a cyclone tower in his factory to separate paint particles from the air using the principle of centrifugal force, but he questioned whether or not it would work in a vacuum cleaner. __(38)__ Dyson sought to sell his new design, but conventional vacuum cleaner manufacturers were uninterested. Instead, he sold it to a Japanese company. The product soon became a commercial success. __(39)__

Now, his company is a big player on the global market. Spending seven million British pounds per week on research and development, the company employs some 3,500 engineers and scientists, and is involved in over 40 university research programs. __(40)__ Most product designs are started by Dyson himself. The prosperous company is the UK's largest investor in robotics and artificial intelligence research, which it considers huge growth areas.

- (A) Dyson funneled the profits into setting up his own company.
- (B) The Dyson array of technologies will culminate in this single, highly anticipated product offering, to be unveiled in 2020.
- (C) It's often said that necessity spawns invention.
- (D) A working team of around 400 engineers and a budget of at least US\$2.6 billion are proof of Dyson's commitment to the ambitious project.
- (E) Five years and more than 5,000 prototypes later, the first bagless vacuum cleaner became a reality.
- (F) Their product line includes fan-heater combinations, ultrasonic humidifiers, air purifiers, and washing machines.
- (G) Dyson's disappointment motivated him to come up with a new design that would eliminate the problem and create a better vacuum.

V. Reading Comprehension 20%

Section A

Although we can imagine life based on something other than carbon chemistry, we know of no examples to tell us how such life might arise and survive. We must limit our discussion to life as we know it and the conditions it requires. The most important requirement is the presence of liquid water, not only as part of the chemical reactions of life, but also as a

medium to transport nutrients and wastes within the organism.

The water requirement automatically eliminates many worlds in our solar system. The moon is airless, and although some data suggest ice frozen in the soil at its poles, it has never had liquid water on its surface. In the vacuum of the lunar surface, liquid water would boil away rapidly. Mercury too is airless and cannot have had liquid water on its surface for long periods of time. Venus has some traces of water vapor in its atmosphere, but it is much too hot for liquid water to survive. If there were any lakes or oceans of water on its surface when it was young, they must have evaporated quickly. Even if life began there, no traces would be left now.

The inner solar system seems too hot, and the outer solar system seems too cold. The Jovian planets have deep atmospheres, and at a certain level, they have moderate temperatures where water might condense into liquid droplets. But it seems unlikely that life could begin there. The Jovian planets have no surfaces where oceans could nurture the beginning of life, and currents in the atmosphere seem destined to circulate gas and water droplets from regions of moderate temperature to other levels that are much too hot or too cold for life to survive.

A few of the satellites of the Jovian planets might have suitable conditions for life. Jupiter's moon Europa seems to have a liquid-water ocean below its icy crust, and minerals dissolved in that water would provide a rich broth of possibilities for chemical evolution. Nevertheless, Europa is not a promising site to search for life because conditions may not have remained stable for the billions of years needed for life to evolve beyond the microscopic stage. If Jupiter's moons interact gravitationally and modify their orbits, Europa may have been frozen solid at some points in history. Such periods of freezing would probably prevent life from developing.

Saturn's moon Titan has an atmosphere of nitrogen, argon, and methane and may have oceans of liquid methane and ethane on its surface. The chemistry of life that might crawl or swim on such a world is unknown, but life there may be unlikely because of the temperature. The surface of Titan is a deadly -179°C (-290°F). Chemical reactions occur slowly or not at all at such low temperatures, so the chemical evolution needed to begin life may never have occurred on Titan.

Mars is the most likely place for life in our solar system. The evidence, however, is not encouraging. Meteorite ALH84001 was found on the Antarctic ice in 1984. It was probably part of debris ejected into space by a large impact on Mars. ALH84001 is important because a team of scientists studied it and announced in 1996 that it contained chemical and physical traces of ancient life on Mars.

Scientists were excited too, but being professionally skeptical, they began testing the results immediately. In many cases, the results did not confirm the conclusion that life once existed on Mars. Some chemical contamination from water on Earth has occurred, and some chemicals in the meteorite may have originated without the presence of life. The physical features that look like fossil bacteria may be mineral formations in the rock.

Spacecraft now visiting Mars may help us understand the past history of water there and paint a more detailed picture of present conditions. Nevertheless, conclusive evidence may have to wait until a geologist in a space suit can wander the dry streambeds of Mars cracking open rocks and searching for fossils.

We are left to conclude that, so far as we know, our solar system is bare of life except for Earth. Consequently, our search for life in the universe takes us to other planetary systems.

41. Which of the following sentences does **NOT** support the main idea of this passage?
- (A) The planet that has the greatest probability for life in the past or now is Mars, but more investigation is required to draw conclusions.
 - (B) Although some of the moons that revolve around Saturn and Jupiter have conditions that might support life, the evidence contradicts this possibility.
 - (C) It is too hot for life on the planets near the Sun in the inner solar system and too cold on the planets most removed from the Sun in the outer solar system.
 - (D) Europa has an ocean under the ice on the surface of the moon, which may contain the chemical combinations required for life to evolve.
42. Which of the following statements about the water on Venus is true?
- (A) The water evaporated because of the high temperatures.
 - (B) The water became frozen in the polar regions.
 - (C) Only a little water is left in small lakes on the surface.
 - (D) Rain does not fall because there is no atmosphere.
43. What can be inferred from the passage about the Jovian planets?
- (A) Some of the Jovian planets may have conditions that could support life.
 - (B) Europa is the largest of the moons that revolve around Jupiter.
 - (C) Jupiter is classified as one of the Jovian planets.
 - (D) The orbits of the Jovian planets have changed over time.
44. Why does the author mention the meteorite “ALH84001” in paragraph 6?
- (A) Because it was found in Antarctica about fifty years ago
 - (B) Because scientists thought that it contained evidence of life on Mars
 - (C) Because it was evidence of a recent impact on Mars
 - (D) Because the meteorite probably came from Mars a long time ago
45. Which of the following statements most accurately reflects the author’s opinion about life in our solar system?
- (A) Life is probably limited to planets in the inner solar system.
 - (B) There is a large body of evidence supporting life on Mars.
 - (C) We should explore our solar system for conditions that support life.
 - (D) There is little probability of life on other planets.

Section B

The word “biodiversity” is a term heard with increasing frequency in the ongoing debate over how best to protect the world’s environment, and more specifically, how to preserve its rapidly dwindling numbers of plant and animal species. In very general terms, “biodiversity” refers to the number of plant and animal species that can be found in a particular habitat or ecosystem. This is apparently a very simple concept, but the simplicity of it belies its significance. A better popular understanding of the real meaning of biodiversity and of its importance to the circumstances in which we presently find ourselves is critical to the success of efforts to protect the environment, and therefore essential to our own survival.

Global biodiversity, which is the total number of plant and animal species existing on the planet at any one time, can only be estimated; and only very roughly estimated at that. Undoubtedly, many species remain to be discovered. Some of these, such as insects and microscopic life, are small enough to have escaped our notice, while others dwell in areas we have only begun to explore; the species inhabiting the deepest ocean depths, for example. It must also be remembered that we are in the midst of a mass extinction event. Species are now disappearing at a rate estimated to be between 1,000 and 10,000 times faster than the average for the history of life on earth. Taken together, these two uncertain elements prevent the global biodiversity estimate from becoming much more than an educated guess. The current best estimate is somewhere in the neighborhood of 100 to 200 million species.

This number, while it may be of some interest to nonscientists, isn’t of much real value to researchers. They are generally more concerned with local biodiversity. Despite the apparent enormity of the number of species that inhabit the earth as a whole, local biodiversity—the number of species found in any one habitat—fluctuates greatly as we cross the boundaries separating the ecosystems that make up the Earth’s biosphere. It reaches its highest levels on the coral reefs and in the tropical rain forests where there may be thousands of species per acre.

Of course, it is this value—the measure of local biodiversity—that is most useful for anyone concerned with assessing the health of an ecosystem or protecting it from destruction. In measuring the biodiversity of a particular ecosystem, biologists are usually quite **impartial** when weighing the relative significance of each species. Most are assigned a value of one, the total number of species then representing the target value. However, there are two conditions under which one species may be weighted more heavily than others. This would certainly be the case for any species that by virtue of its genetic uniqueness would constitute a special loss to the global gene pool in the event of its extinction. The tuatara is a good example of just such a species. As the only surviving member of a family of reptiles that, except for it, died out 60 million years ago, the tuatara qualifies on grounds of genetic uniqueness to be weighted more heavily in calculating the biodiversity of its habitat.

A species may be accorded bonus points in the biodiversity equation for another reason as well; it may be deemed more significant by virtue of the role it plays in the ecosystem. An

example of this would be the California sea otter. The preferred food of this species of marine mammal is the sea urchin; a marine invertebrate, which feeds on a certain type of sea grass known as kelp. Were it not for the otter's contribution in controlling the sea urchin population, the undersea kelp forests would surely be decimated by a dramatic increase in the population of sea urchins. This would remove a key supporting element—the kelp—from the habitat of many fish and invertebrate species that depend on it. The effect of this would be a dramatic loss of local biodiversity. This, in turn, would fundamentally alter an entire undersea habitat and undoubtedly put at risk a number of different species that have adapted to its peculiar characteristics. Therefore, the behavior of the otter in actively maintaining the local diversity of species dictates that it should be assigned a higher biodiversity value.

46. What was the author's main purpose in writing the passage?
- (A) To illustrate why biodiversity is essential to our survival.
 - (B) To explain the concept of biodiversity.
 - (C) To show why local biodiversity is more important than global biodiversity.
 - (D) To clarify the dangers that result from declining biodiversity.
47. Which of the following are paragraphs 2 and 3 primarily concerned with?
- (A) A comparison between global and local biodiversity.
 - (B) An examination of the areas highest in biodiversity.
 - (C) The recent focus on local rather than global biodiversity.
 - (D) How the global biodiversity affects specific ecosystems.
48. According to the passage, which of the following is **NOT** important in assessing biodiversity?
- (A) The special function a particular species plays in an ecosystem.
 - (B) The number of species present in an ecosystem.
 - (C) The size of the area an ecosystem covers.
 - (D) The genetic uniqueness of the species within an ecosystem.
49. The word "impartial" in paragraph 4 is closest in meaning to _____.
- (A) complete
 - (B) subjective
 - (C) uncertain
 - (D) neutral
50. Which of the following statements is supported by the passage?
- (A) Local biodiversity may change, but global biodiversity does not.
 - (B) All species have the same significance when considering biodiversity.
 - (C) The concept of biodiversity is of little value to ecologists.
 - (D) The Earth is experiencing a reduction in global biodiversity.

第二部分、非選擇題 40 %

I. Please summarize the following passage in 250 words based on the English proficiency level of junior high school freshmen (10 %) and design 5 cloze questions, each with 4 options (10%).

Jean Twenge had never seen anything like it. The San Diego State University professor in personality psychology had been studying generational differences for 25 years, since she was a 22-year-old Ph.D. student at the University of Michigan. Her research had generated more than 120 scientific publications.

In 2012, when the proportion of Americans who own smartphones surpassed 50 percent, she noticed abrupt changes in teen behavior and emotional states.

“In these big national surveys of teens that I keep an eye on, there started to be some pretty sudden changes in the ways teens use their time and how they said they were feeling in their mental health,” she said.

Among other things, teens are not hanging out as much with friends, in no rush to drive, dating less and getting less sleep. Most alarming, despite their continual connectivity, they are lonely. And rates of teen depression and suicide have skyrocketed since 2011.

“On these big surveys there are six questions that asked about loneliness, including ‘How often do you feel lonely?’ and ‘How often do you feel left out?’ And the responses show that same pattern of mental health not having done much, or even gotten a little bit better, until 2007,” she said. “Then they start to tick up, and in 2012, those feelings of loneliness and feeling left out shoot upward. And that, of course, is maybe due to social media, where teens can see everything that their friends are doing that they didn’t get invited to.”

The result of Twenge’s deep dive into multigenerational data of more than 11 million individuals, cutting across income, racial, and regional boundaries, is her new book: *iGen: Why Today’s Super-Connected Kids Are Growing Up Less Rebellious, More Tolerant, Less Happy—and Completely Unprepared for Adulthood—and What That Means for the Rest of Us*.

The book is chock-full of information, often represented in graphs that show a continuum of data points regarding teen emotional health and then a decline once we enter the age of the smartphone, beginning with the 2007 release of the iPhone.

“It’s not an exaggeration to describe iGen as being on the brink of the worst mental-health crisis in decades,” she told me. “Much of this deterioration can be traced to their phones. It’s not just the technology....It’s really the social media, which is the most common risk they are facing.”

According to her research, teens who spend more time than average on screen activities are more likely to be unhappy, and those who spend more time on non-screen activities are more likely to be happy. And many of the problems are most pronounced among girls.

“I found that teens are spending less time with their friends in person,” Twenge said. And that’s probably because they’re spending so much time communicating with their friends through their phones. That is also another really key piece of why these mental-health issues have started to go up so steeply. It’s not just that they’re spending time with the screens, which isn’t very fulfilling and probably has negative effects, but also not doing these in-person activities, which are beneficial.”

“Sporadic use is unlikely to be harmful,” she said. “Electronic device use was linked to unhappiness and mental-health issues only after more than two hours of use a day.”

Parents should consider installing apps that limit time spent on smartphones and that limit teens to one social-media site.

Perhaps most important: don’t allow teens access to the device after they go to bed.

My advice after being consumed with her book? That we all make the data contained in her book a point of discussion with our kids.

II. In order to enhance students’ English competency, our school plans to offer bilingual courses this year. As a local English teacher, you are going to teach a course with a foreign teacher. Please answer the following questions within 350 words.

- (1) Please elaborate on the pros and cons of bilingual education. (5%)**
- (2) Take a one-period course for example. Specify a course topic and illustrate how you are going to collaborate with the foreign teacher. (15%)**