第壹部分:選擇題

第一大題:文意選填

說明:第1題至第20題,每題一個空格,請依文意在文章後所提供的(A)到(AC)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1.5分;答錯、未作答或畫記多於一個選項者,該題以零分計算。

第1至10題為題組

On the first of December 1955, the African American seamstress Rosa Parks helped change the __1__ of history on a city bus. Rosa boarded the bus after a day's work at a Montgomery, Alabama, department store. She settled towards the middle, past the first several rows, which at that time were __2_ for white people. After making a few stops, the bus became full. Then a white man boarded, but there was __3_ for him to sit. The driver ordered Rosa and the rest of the black passengers in her row to stand at the back of the bus and let the white man sit, but Rosa refused to give up her seat.

For violating the laws of segregation, referred to as the "Jim Crow laws" (which were meant to keep white people and black people __4__), Rosa was arrested and fined. Her refusal to move was a quiet and simple action, but she took an enormous risk that evening. She also became a hero and an inspiration to people all over the nation who were fighting for __5__ equality. In response to Rosa's arrest, blacks in the city of Montgomery __6__ the public bus system for more than a year. Like her, they had had enough of being treated like second-class citizens. The Monday after Rosa's arrest, most black __7__ walked to where they needed to go—some traveling more than 20 miles.

Finally, in November of 1956, the U.S. Supreme Court __8__ that the Jim Crow laws that kept blacks and whites segregated were unconstitutional. Rosa Parks challenged the law and showed people far beyond her own town how cruel and __9__ segregation could be, and she won. The boycott ended more than a month later, when the Montgomery buses were integrated, but the __10__ to racial prejudice did not stop there. More and more black people across the U.S stood up for their own civil rights and pursued true equality. One woman's strength and commitment to change helped fuel a movement. Sometimes that is all it takes.

	segregatio	n 種族隔離 u	ınconstitutional 違憲的	commitment 奉獻
(A) nowhere	(B) resistance	(C) reserve	d (D) racial	(E) separate
(F) gender	(G) commuters	(H) promot	ed (I) boycotted	(J) course
(AB) ruled	(AC) unjust			

第 11 至 20 題為題組

Ever wonder why American elections are held on Tuesdays? The answer lies with America's 19th-century farmers. Americans first began the custom of weekday voting in 1845, when Congress passed a federal law __11__ the first Tuesday following the first Monday in November as Election Day. Before then, states were allowed to hold elections any time they __12__ within a 34-day period before the first Wednesday in December, but this system had a few serious flaws. Knowing the early voting results could affect __13__ and sway opinion in states that held late elections, and those same last-minute voters could __14__ decide the outcome of the entire election. Faced with these issues, Congress created the __15__ Election Day in the hope of streamlining the voting process.

But why a Tuesday in November? The answer stems from the agrarian makeup of 19th-century America. In the 1800s, most citizens worked as farmers and lived far from their __16__ place. Since people often traveled at least a day to vote, lawmakers needed to allow a two-day __17__ for Election Day. Weekends were __18__, since most people spent Sundays in church, and Wednesday was market day for farmers. With this in mind, Tuesday was selected as the first and most __19__ day of the week to hold elections. Farm culture also explains why Election Day always falls in November. Spring and early summer elections were thought to interfere with the planting season, and late summer and early fall elections __20__ with the harvest. That left the late fall month of November—after the harvest was complete, but before the arrival of harsh winter weather—as the best choice.

🕮 streamline 使效率提高 agrarian 農業的 interfere 干擾

(A) satisfied (B) window

(C) turnout

(D) current

(E) pleased

(F) polling

(G) deciding

(H) impractical

(I) convenient

(J) hardly

(AB) potentially

(AC) overlapped

說明:第21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 21 至 25 題為題組

Unless they were rich, American children had always worked—on their family's farms, or as apprentices. But with industrialism, immigration, and city poverty, the work of children changed in the late 1800s, 21 . Ending child labor became one of the important crusades of the Progressive Era.

The effort was led by the National Child Labor Committee, located in New York City. In 1908, to build public support, the committee hired photographer Lewis Wickes Hine to __22__. Now recognized as one of the founders of social documentary photography, Hine went to mills throughout the South, taking pictures of tiny barefoot children tending enormous looms. In New York City, he photographed immigrant families around the kitchen tables in their tenement apartments, shucking nuts or making artificial flowers to sell. Some of the children were still in high chairs.

Hine also photographed the children who sold newspapers on street corners in New York. Known as newsies, many were orphans and homeless. New York State tried to __23__. It required that newsies carry a badge at all times, and issued the badges only to boys over 10 and girls over 16. Hine's typed caption, printed with a photograph of newsboy John Malanga, shows how easily children could duck the law, and how far this young boy traveled from home to sell his papers.



As the committee predicted, the public was __24__ Hine's photos. It was one thing for children to help their parents with the crops, but something else entirely when __25__. Even the life of newsies, which had a certain romance and independence to it, no longer seemed right for the smallest children. But despite growing public anger, child labor was not outlawed in the United States until the 1938 Fair Labor Standards Act.

□ apprentice 學徒 crusade 改革運動 outlawed 非法的

- 21. (A) and child labor reached new extremes
- (B) and so did people's attitudes toward child labor
- (C) and so did their working environment
- (D) and youngsters began to be paid higher wages
- 22. (A) sort the types of working children
- (B) record the lives of working children
- (C) support the families of working children (D) analyze the backgrounds of working children
- 23. (A) increase the demand for child labor
 - (B) sway the public into supporting the plan
 - (C) provide a new opportunity for children
 - (D) keep the youngest children out of this business
- 24. (A) outraged by
- (B) delighted by
- (C) proud of
- (D) afraid of

- 25. (A) children were forced to take pictures for money
 - (B) child labor victims lived on low wages
 - (C) children were seen begging for money on the streets
 - (D) young kids worked long hours in dangerous conditions

第 26 至 30 題為題組

Rosemary is a popular herb with a long history that is found in kitchens everywhere. It has beneficial attributes like enhancing memory. In Latin, the name rosemary translates to mean "dew of the sea." In ancient times, people believed that the Greek goddess of love, desire, and beauty, Aphrodite, was covered in rosemary when she was born and emerged out of the sea. It was often thought that rosemary __26__. Therefore, brides and grooms in the Middle Ages would wear rosemary at weddings. __27__, rosemary oil is frequently used as an ingredient in perfume or as an air freshener.

For centuries, people have also associated the smell of rosemary with memory. In Shakespeare's play Hamlet, Ophelia says, "There's rosemary, that's for remembrance." For many years, rosemary __28__. In recent years, science has proved that there may be some truth behind this idea.

Researchers did a study with 150 people over the age of 65 who were sent to different rooms and asked to memorize some information. One room had no smell, another had a lavender scent, and the other smelled like rosemary. The people in the room with rosemary __29__ on memory tests than people in the room with no smell. People in the rosemary room also said that their mood was better, and they felt more alert. So the next time __30__, perhaps a whiff of rosemary can refresh your brain and get you back on track.

□ attributes 特質

- 26. (A) brought sadness and grief to the house
 - (B) had magical healing properties
 - (C) protected people from evil spirits
 - (D) brought good luck to couples in love
- 27. (A) Since it has a pleasant smell
 - (B) Although it has been widely used
 - (C) Because it is a commonly seen plant
 - (D) When it becomes a popular practice
- 28. (A) became one of the essential ingredients in the kitchens of five-star restaurants around the world
 - (B) turned into a symbol of love and was frequently used as one of the flowers in the bride's bouquet
 - (C) was even thrown on coffins at traditional funerals as a way to encourage remembering the dead
 - (D) contained chemicals particularly effective in fighting against memory-related diseases caused by age
- 29. (A) scored much higher
 - (B) did significantly worse
 - (C) performed no better
 - (D) showed no differences
- 30. (A) you meet your soulmate
 - (B) you have difficulty falling asleep
 - (C) you're feeling a bit tired and forgetful
 - (D) you're competing in a cooking contest

第三大題:篇章結構

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。

Humans have five senses—sight, smell, taste, touch, and hearing. When a sense is aroused, messages are sent to the brain. Our brain interprets the messages, allowing us to understand what we are looking at, smelling, and so forth. __31__ This is known as synesthesia.

Synesthesia takes place when a person notices or experiences a secondary effect when using their senses.

__32__ Synesthesia tends to vary from person to person, with no two cases being the same.

__33__ MRI scans have confirmed synesthesia is a real phenomenon. Scans have showed that multiple areas of synethetes' brains switch on when one of the senses is stimulated.

Scientists studying synesthesia have found that a high number of artists and musicians are synesthetes. Russian painter Wassily Kandinsky took inspiration from his combined senses to produce his abstract art. Other known or suspected synesthetes include Vincent van Gough, jazz legend Duke Ellington, and musicians Kanye West and Pharrell Williams. __34__

One man who wants to help non-synethetes to experience what synesthesia is like is British composer Nick Ryan. He created a musical show that mixed electronic and classical music. __35__ For Ryan and others like him, synesthesia "makes listening to music very enjoyable."

u synesthesia 聯覺 secondary 次要的 stimulate 刺激

- (A) As the music plays, "matching" colors are projected onto a big screen.
- (B) Research has been carried out into what causes this curious condition.
- (C) For example, some people associate particular letters or numbers with a color.
- (D) However, sometimes the wires in our brain get crossed, leading to unusual results.
- (E) These cases suggest that synesthesia may serve as a source of inspiration for musicians, artists, and other creative types.

第四大題:閱讀測驗

說明:第36題至第46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。

The world makes 300 million tons of plastic every year. A lot of it ends up in the ocean. More than 5 trillion plastic pieces are floating there right now. The plastic lasts for a long time. It doesn't go away. It just breaks into smaller pieces. These tiny pieces of plastic get eaten by plankton and by fish. When we eat fish, we are eating plastic, too.

By the year 2050, the ocean will have more plastic than fish. Scientists say most of this plastic comes from packaging. This includes plastic bottles for shampoo, soda and water. It also includes plastic bags for chips and snacks.

Many governments want to change this. For example, a government in Europe recently approved new rules. They want to get rid of throw-away plastics. Plastic baggies wouldn't be allowed. Saran wrap and plastic forks and spoons wouldn't be allowed either.

- 36. Which of the following is NOT mentioned in the passage?
 - (A) Problems caused by plastic.
 - (B) Process of the plastic breaking into pieces.
 - (C) The main source of plastic.
 - (D) A solution to the plastic problem.

In the U.S., people can begin driving at 16 years old. However, some people believe this should be changed to 18. Studies show that 18 year olds have far fewer fatal car accidents than 16 year olds. Furthermore, some people hope that preventing teens from driving would encourage participation in more active pursuits. For example, perhaps kids would ride bikes or walk more. Finally, people are more mature when they reach adulthood. They are more likely to make logical decisions while driving. While a vast number of teens might disagree, many adults feel that raising the driving age would make the roads safer.

- 37. According to this passage, which of the following is NOT correct?
 - (A) The topic of this article is Why 16-year-old Teens Should Be Allowed to Drive.
 - (B) When people are older, they tend to make smarter choices while driving.
 - (C) 16-year-old drivers are more likely to have severe car accidents than 18-year-old drivers.
 - (D) Kids are expected to use more physically active forms of transportation if not allowed to drive.

第 38 至 39 題為題組

While the concept of throwing a disc stretches back to the ancient Greek Olympics, the idea of playing Frisbee as a modern sport dates back to a magazine article published in 1957. The American love of food helped establish it in popular culture as well. The food in question was pie. At the turn of the century, the Frisbie family opened a new bakery in the U.S. state of Connecticut and soon saw success. Eventually, they were producing about 80,000 pies per day.

Students at local universities would use the pie pans as throwing discs, calling the name to let their friends know they'd just thrown one. Eventually, other objects were used, but the name stuck. Around that time, a man named Fred Morrison developed a plastic disc inspired by a flying saucer. A local toy company, called Wham-O, started producing his idea. Upon hearing the Frisbie name during an Ivy League schools tour, Wham-O renamed its product the "Frisbee" and has since sold over 100 million.

- 38. What is the purpose of this passage?
 - (A) To cover an interesting period of US history.
 - (B) To predict the development of future trends.
 - (C) To introduce the origins and naming of a popular toy.
 - (D) To compare the success of two different businesses.
- 39. What inspired the development of Fred Morrison's toy disc?
 - (A) His love of delicious pies.
 - (B) An unknown flying object.
 - (C) The opening of a new bakery.
 - (D) An Ivy League school tour.



DECEMBER 2018

DEAR FAMILY,

This month's issue introduces your child to the short-term and long-term costs of pet ownership. Fact is, many people give up their pets because they didn't consider how much that four-legged friend would cost, in money and time, over the long run. Even if your family isn't pondering pet ownership, the lesson in financial planning applies to many other situations we encounter in life. Think of all the things that we buy—cell phones, cars, houses—that require a down payment with additional costs later on. Our goal is to make sure your child is ready to handle them.



COOL KID FACTS

- According to the 2017–2018 National Pet Owners Survey, 68% of U.S. households include a pet. About 60 million U.S. households include a dog (the most popular pet), compared with 47 million that include a cat.
- In 2017, U.S. owners spent nearly \$70 billion on their pets. About \$29 billion of that was spent on food.
 - According to the National Society for the Prevention of Cruelty to Animals, keeping a pet fish is a bargain, with initial costs of \$235 and annual costs of \$35.

AT-HOME ACTIVITY

Read "Get Involved," on page 4 of the magazine, with your child. The article suggests a few ways that kids can spend quality time with animals, even if they don't own a pet. Ask your child which strategy is most appealing: volunteering at an animal shelter or providing a paid service such as pet sitting. Discuss what makes the activity appealing and the goals it will help your child achieve.

Together, list the pros and cons of spending time with animals through volunteer work versus a business. Earning money will likely end up on the pro side of starting a business. But challenge your child to consider disadvantages of turning a love of animals into a business. Dog walking, for instance, can be hard work and a lot of responsibility.

- 40. What is the purpose of the **AT-HOME ACTIVITY** section?
 - (A) To teach kids how to treat their pets.
 - (B) To advise parents to read with their children.
 - (C) To offer parents suggestions for guiding their children.
 - (D) To encourage kids to raise pets.
- 41. According to the **COOL KID FACTS**, which of the following statements can be inferred?
 - (A) Raising cats as pet is more expensive than raising fish.
 - (B) In 2017, pet owners spent more than one-third of their income on their pets' food.
 - (C) 13 million U.S. families raise both dog and cat as pet.
 - (D) In America, many people would prefer to have dogs as pet because it doesn't cost much.

第 42 至 43 題為題組

Everyone is familiar with being tickled, and everyone hates it. You can convince yourself that you like it, but science—and the fact that you'll start trying to squirm away after a few seconds—says otherwise.

As tickling induces laughter in the receiver, this leads people to assume that it is enjoyable. However, scientists have figured out that this laughter is an involuntary response to tickling. Studies have shown that two areas of the brain are stimulated by the act of tickling: the Rolandic operculum and the hypothalamus. Both jokes and tickling cause the Rolandic operculum to respond, but only the latter triggers activity in the hypothalamus, a part of the brain that handles primitive instincts. In the case of tickling, scientists believe laughter is a defense mechanism that shows submission and ease tension in this low-level conflict. It has also been noted that the most sensitive areas of the body are often areas of vulnerability, and that tickling teaches humans to protect themselves and fend off attacks.

The fact that we can't tickle ourselves is a bit more straightforward. Located at the base of the brain is the cerebellum, which receives sensory information and can distinguish between expected and unexpected sensations. As the cerebellum is aware of your own attempt to tickle yourself, it essentially ignores the sensation and doesn't pass on the information to the rest of your brain. So next time you get tickled by someone, you can explain exactly why you're laughing even though you don't find it very funny.

- 42. According to the passage, which of the following is true about tickles?
 - (A) We can control ourselves not to laugh when tickled by others.
 - (B) The laughter caused by tickles is the same to that caused by a joke.
 - (C) We like being tickled because it makes us laugh.
 - (D) The laughter caused by tickles is proved to be associated with primitive instincts.
- 43. According to the passage, which of the following is NOT correct?
 - (A) When people tickle themselves, cerebellum stops them from laughing.
 - (B) When people get tickled, cerebellum causes their bodies to twist away.
 - (C) When people hear a joke, the activity of Rolandic operculum is detected.
 - (D) When people laugh, they don't necessarily find something interesting.

第44至46題為題組

The World Mosquito Program (WMP) is a non-profit initiative that works to protect the global community from mosquito-borne diseases such as Zika, dengue, chikungunya and yellow fever. The WMP introduces *Wolbachia* into *Aedes aegypti* mosquitoes, the primary carrier of these viruses. *Wolbachia* are naturally occurring bacteria found in 60% of all insect species, and are safe for humans, animals and the environment.

Once mosquitoes with *Wolbachia* are released, they breed with wild mosquitoes. Over time, the majority of mosquitoes carry *Wolbachia*. These mosquitoes have a reduced ability to transmit viruses to people, decreasing the risk of Zika, dengue, chikungunya and yellow fever outbreaks.

The WMP is currently operating in 12 countries across Asia, the Americas and the Pacific Islands, as well as our pioneer program in Australia. The WMP has grown from a single focus on dengue to tackle other diseases carried by the *Aedes aegypti* mosquito, including Zika, chikungunya and yellow fever.

The WMP has two regional hubs – our Asia hub in Ho Chi Minh City, Vietnam, and Oceania hub, based at Monash University in Melbourne, Australia. These hubs support projects in their respective regions and contribute to core global operations.

The WMP uses a uniquely self-sustaining method that does not pose risk to existing ecosystems and has the potential to transform the global fight against life-threatening viral diseases.

Following years of laboratory research and field trials with promising results, the World Mosquito Program's approach has widespread support from communities, governments and regulators. The WMP is now working to make our approach more affordable and effective for use in at-risk communities around the world.

- 44. What is this article mainly about?
- (A) The breeding patterns of mosquitoes with Wolbachia.
- (B) The impact of dengue fever on people.
- (C) An effective way to fight against mosquito-borne diseases.
- (D) A charitable event held to rid the world of mosquito-borne diseases.
- 45. Who is most likely to be the writer of this article?
- (A) A patient that once suffered from dengue fever.
- (B) A local resident that helps breed mosquitoes Wolbachia.
- (C) A spokesperson of a government that supports WMP's projects.
- (D) A researcher that works for The World Mosquito Program.
- 46. Which of the following statements about Wolbachia is correct?
- (A) Wolbachia are now the most effective in dealing with dengue fever.
- (B) Wolbachia exist mainly in sixty percent of Aedes aegypti mosquitoes.
- (C) Wolbachia can help reduce the possibility of dengue fever outbreaks.
- (D) Wolbachia can successfully kill viruses that cause mosquito-borne diseases.

第貳部分: 簡答題

說明:第47題至第54題,閱讀完文章後,請針對各題在答案卷上作答。各題答對者,依每題後配分給分;答錯、未作答該題以零分計算。

第 47 至 50 題為題組

When light strikes an object, some of it passes through the object, and some of it is reflected and reaches your eye. When an object is wet, more light penetrates the object, so less light is thrown back. As a result, less light reaches your eye and so the wet object looks darker. Read on for a more detailed explanation.

The light that is reflected from an object is the light that we perceive. How light or dark an object appears depends on how much light that strikes an object reflects back to our eye. For an object whose material has an index of refraction close to that of air, very little light is reflected. For an object whose material has an index of refraction different than air, most of the light that strikes it is reflected.

When an object gets wet and absorbs water, its index of refraction effectively moves closer to that of air. When light strikes a wet object, therefore, less light is reflected than when it is dry. A pair of wet pants, a wet sidewalk, and a wet beach, therefore, reflects less light, and therefore looks darker. Steel, glass or plastic doesn't look darker when it is wet because it doesn't absorb any water, and therefore the same amount of light is reflected whether it is dry or wet.

🚇 perceive 意識到 refract 折射 transmit 傳遞

Fact 1

When a material gets wet and absorbs water, the material's index of refraction is effectively changed, making it so that more light penetrates and less light is reflected.

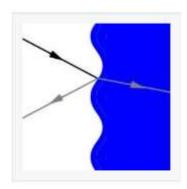
Fact 2

When light moves from air to water, some of the light reflects and some refracts. The reflected light "bounces" off the water, and the refracted light bends at the air/water boundary and passes through the water.

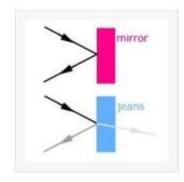
Fact 3

When light strikes any object, some of the light is reflected and some is refracted and transmitted through or absorbed by the object. The relative amounts of which depend on the material properties of the object, its index of refraction.

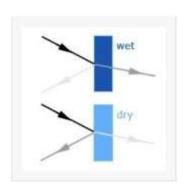
Picture 1



Picture 2



Picture 3



- 47. What question does this article try to answer? (3 %)
- 48. Which picture best illustrates each fact? Please match Fact 1, Fact 2, and Fact 3 with Picture 1, Picture 2, and Picture 3. (2 分)
- 49. Mike is your friend. You are helping him prepare for the physics test tomorrow. You need to talk about Fact 1, Fact 2, and Fact 3. **In what order will you talk about these three facts** so that Mike can better understand this article? (2 分)
- 50. Please explain why a plastic yellow umbrella doesn't get darker when it gets wet. (2 分)

第 51 至 54 題為題組

I've always liked to look into the mirror, fascinated with the face of a young woman glowing with maturity and confidence in her future. And my fascination has something to do with my Granny, with whom I spent most of my childhood.

I remembered clearly that one night, I heard her murmuring, "Women can't be seen. Women can't be seen." Only now as a young woman myself can I understand it was not the physical visibility that granny had in her mind. Granny spent all her life taking care of her family. She cooked for her husband and ten children. Whenever guests came, she and other female family members had to eat by the stove in the small kitchen. At family discussions, she was never asked for her opinion. When Grandpa passed away, she had to listen to my uncle, her elder son, who became the master of the house. Through years of toil, she fulfilled her duties as daughter, wife and mother. Yet a person, she remained little noticed. If she had seen herself in the mirror of the dressing table, she was never visible in the mirror of society.

I have been living a different life. At home, I made decisions together with the rest of the family. In school, I take charge of various activities. Not only that, I can even do something Granny could not have dreamed of—making decisions of my own future. I could choose from very competitive universities as I came out of high school. Now upon graduation, I am faced with series of decisions—to further my studies or go to work, to stay in China or go to abroad, to get married right away or to remain single for a bit longer.

It does not matter whether I will become famous or rich, but I will treasure the chance to demonstrate my potentials to help other women to demonstrate theirs as full member of the society, fully visible in the mirror of history. I'll treasure it because the abundance of choice that I enjoy can only be achieved through decades of efforts of my granny, my mom, and millions of other Chinese women. However, the misconception that men are superior to women is still dominating many people's mind. While remaining courageous to compete, we are expected to be quiet, loyal and obedient.

The story of my grandmother and myself mirrors the lives of millions of other women in China and perhaps in the world. Many of them still live the lives of my grandmother. Their worth is not yet recognized. It is then the responsibility of a young woman like me to study hard and work hard so woman will be seen in the mirror of the society.

This is my dream. This dream I believe is not only shared by many of my grandmothers, mothers, and sisters, but also by many of our fathers, brothers, husbands, and male colleagues. It will not come true until everyone fully realizes women can contribute to society and should be guaranteed the right to. Women hold half the sky. Thank you.

- 51. According to this speech, how does the speaker interpret her Granny's "Women can't be seen"? Please give evidence from the speech. (3 分) (※此題可用英文或中文作答)
- 52. According to this speech, what is the biggest difference between the speaker and her Granny? Please give one example from the speech. (2 分)
- 53. Please use one adjective to describe the speaker's Granny, and support your choice of adjective with evidence from the speech. (2 %)
- 54. What is the speaker's dream? What challenge is the speaker likely to meet while she is working hard to realize her dream? (2 分)

* * * * * * * 試 題 結 束 * * * * * *