

請務必於試卷紙上作答，違者該科不於計分。

I. **Vocabulary: Choose the answer that best matches the meaning of each bold word or phrase (20%)**

1. More recently, the term “appropriate technology” has come to mean not just technology which is suited to the needs and capabilities of the user, but technology takes particular account of environmental, ethical, and cultural **considerations**.
A. cogitation B. affability C. affection D. indifference
2. The aim of the show, “The Concert for Bangladesh” in 1971 was to raise money for the **relief** of the refugee crisis following the cyclone that hit the country in 1970 and the Bangladesh Liberation War.
A. security B. dedication C. alleviation D. guidance
3. Culture is learned, shared, and transmitted to future generations **primarily** by symbolic systems. The most obvious symbolic system humans use is language – both spoken and written.
A. dramatically B. occasionally C. trivially D. principally
4. In the fifteenth century, Europe became more prosperous, political authority was more centralized, and the Renaissance fostered a more expansive outlook among **literate** people in the arts and sciences.
A. smart B. educated C. stylish D. spruce
5. In its **inaugural** days, the Web was a strange eclectic collection of personal homepages, a kind of digital wall art that did not rely on mainstream media companies or corporate cash, and was not driven by commercial interests.
A. creative B. beginning C. collective D. uncommon
6. The pre-frontal lobe, located at the very front of the brain, allows humans to **hold on to** a piece of information temporarily while they complete a task.
A. allocate B. release C. snatch D. distribute
7. In the 16th century, Spanish conquerors brought smallpox to the Americas, **decimating** most of the native populations because they had never been exposed to the disease before and had no immunity.
A. massacre B. develop C. observe D. blister
8. In most West countries, it is customary for people to back away when they feel their space has been violated. On the other hand, South Americans stand in close **proximity** to one another.
A. norm B. prevalence C. operation D. closeness
9. Germany had proved its inventiveness long before the modern era. Many inventions that are used every day, including the printing press and the gas-powered engine, can be **attributed to** German inventors.
A. blamed of B. ascribed to C. disproved of D. eliminated for
10. Just a one-hour ferry ride from Mumbai is the island of Elephanta. The island was named by the Portuguese, **supposedly** after a huge statue of an elephant that used to be there.
A. unbelievably B. theoretically C. allegedly D. incredibly

II. Sentence Completion: Choose the word that best completes the sentence (14%)

11. To help a pet look his or her best, grooming services can give our little buddy a _____ haircut.
A. inexpensive B. reversible C. strategic D. gorgeous
12. Taiwan was a major tea exporter. However, since the 1970s, the _____ market has become more important for local growers. Also, there's a greater focus on expensive varieties like Taiwan Tea No. 18.
A. domestic B. foreign C. peripheral D. industrial
13. You eat chili pepper. Your mouth starts to burn. Water fills your eyes. You are experiencing pain. But, after this pain comes _____. A few seconds after you eat a chili pepper, your brain responds and produces special chemicals.
A. hatred B. pleasure C. anger D. abomination
14. In retirement communities throughout the United States, senior citizens live a carefree, child-free existence in gated neighborhoods sometimes _____ as "Disney for adults".
A. looked after B. named after C. referred to D. integrated into
15. The suspect of the murder case had left so many confusing clues on the crime scene that the police officers were quite _____.
A. miserable B. elastic C. befuddled D. interested
16. During a recent vacation, my brother and I visited the island of Ambergris Caye in Belize to do some _____ and diving. The area has beautiful sandy beaches, great deep sea fishing, and numerous dive spots.
A. roller-skating B. snorkeling C. paragliding D. bungee jumping
17. Throughout Western history, women have borrowed men's clothing. Women wear pants, ties, and even men's suits. However, men have rarely worn women's clothing. One of the strongest _____ is against men wearing skirts.
A. taboos B. adjustments C. suspicions D. combinations

III. Written Expression: Identify the underlined word or phrase that must be changed in order for the sentence to be correct (16%)

18. The UK's Paul Curtis, better (A) known as Moose, (B) operating around Leeds and (C) has been commissioned by a number of companies (D) to make reverse graffiti ads.
19. The World Bank (A) has stopped financing hydropower projects (B) in developing countries twenty years ago (C) because of criticism that such projects were harming (D) local communities and the environment.
20. One (A) criticism of initiatives like TOMS is that the money (B) spent by customers might (C) possibly have gone directly to charities. So Mycoskie encourages his customers to become more involved (D) by volunteering to hand-deliver the shoes to children in need.
21. (A) The Fijians' long experience of (B) dealing with the needs of different types of tourists (C) mean they have provided for this by offering (D) less expensive accommodation for backpackers.
22. The Shetland Islands, (A) in the (B) northern part of the United Kingdom, (C) are very small. In fact, they may be difficult to (D) located on a map.

23. The Olympic Games bring fame, status, and (A) excite to their host city. They also bring (B) economic benefits. At the 2008 Summer Games in Beijing, China, (C) for example, tourists spent more than (D) 2 billion.
24. The scientists in Netherlands (A) try to find ways to (B) length a flower's vase life and strengthen flowers to (C) prevent them from being damaged (D) while traveling on rough roads.
25. (A) Despite the gaps that exist between one finding and (B) the other, all the information we have is (C) crucial to our understanding of the (D) evolution of both human beings and animals.

IV. Cloze Test: Choose the best answer for each missing word or phrase in the following passages (20%)

What exactly is culture? Abstract concepts such as culture are difficult to define. Other abstract concepts that we are well (26) are love, justice, and equality. Not everyone, including experts in these areas, will agree on the precise definition of any of these concepts. If you were listening today to a group of anthropologists (27) culture, various specific components of culture would be mentioned. These components of culture may be arranged in several (28): (1) cognitive (process of learning, knowing, and perceiving): ideas, knowledge, symbols, standards, values; (2) behavior (how we act or conduct ourselves): gestures, manners of eating, marriage (29), dancing, social interactions; and (3) artifacts (human material creations): tools, pottery, clothing, architectural features, machines. In other words, within this group of definitions, culture consists (30) what people process cognitively and how the cognitive processes are reflected in human behaviors and in the artifacts, or objects that human create. (Source: Longman Academic Reading Series 5, 2014)

26. A. knowing B. known C. know D. knew
27. A. discussing B. discussion C. discussed D. to discuss
28. A. prescriptions B. instruments C. categories D. personalities
29. A. interactions B. interests C. understanding D. ceremonies
30. A. at B. of C. in D. for

Facebook users who click on the “like” button for a product may trigger the appearance of an ad for that product on the pages for their “friends.” Companies like Twitanalyer and Klout analyze data from Twitter, Facebook, and LinkedIn to determine who has the most influence online and sell the information to businesses that entice the influencers to (31) their products.

The paradox of personalization and the self-expression promoted by the Internet through Twitter, Facebook, and even Chatroulette is that it (32) diminishes the value of personhood and individuality. Read the comments that (33) many blog posts and articles, and it is overwhelmingly evident that violating dignity – someone else's and therefore, one's own – is a cheap and widely circulated currency. This is not only true for subjects that might ordinarily incite partisanship and passion, like sports or politics, but for pretty much anything.

The point of *ad hominem* attacks is to take a swipe (34) someone else's character, to undermine their integrity. The “hive mind” created through our electronic connections necessarily obviates the individual – indeed, that's what makes it a collective consciousness. Anonymity, which flourishes when there is no individual accountability, is one of its key features, and behind it, meanness, antipathy, and (35) have a tendency to rush right in. (Source: Longman Academic Reading Series 4, 2014)

31. A. buy B. send C. pitch D. like
32. A. simultaneously B. impossibly C. unreasonably D. sporadically
33. A. trade B. accompany C. preview D. corporate
34. A. in B. on C. for D. at
35. A. sympathy B. cruelty C. revenge D. kindness

V. Reading Comprehension: Choose the best answers to the following questions (30%)

Researchers in the U.K. have developed a way of storing digital data inside tiny structures contained in glass. The storage technology is so stable and safe that it can survive for billions of years, scientists at the University of Southampton said this week. That's a lot longer than your average computer hard drive.

Sadly, the human inventions don't look like the glittering crystals that Superman uses to generate holograms of people from his home planet. Instead, they take the form of small glass discs that have already been used to store historic documents, like the Universal Declaration of Human Rights and the Bible. "This technology can secure the last evidence of our civilization: all we've learned will not be forgotten," said Peter Kazansky, a professor at the university.

Each disc can hold up to 360 terabytes of data -- the equivalent of 22,500 basic iPhones. The wizardry involved is invisible to the human eye. The scientists use a sophisticated laser to **encode** the information into minuscule formations, known as nanostructures, inside fused quartz. The structures alter the way light travels through the glass, allowing the data to be read by special optical devices.

The researchers call the data storage 5D, because the information is translated into five different dimensions of the nanostructures — their height, length, width, orientation and position. The scientists from Southampton, who are presenting their research at an international conference in San Francisco on Wednesday, say they are looking for industry partners to further develop and commercialize the technology. (Source: New 'Superman' crystals can store data for billions of years, *CNN Money*, February 17, 2016)

36. What is the purpose of this passage?
- A. to show why historic documents should be appropriately stored
 - B. to discuss the differences of the inventions by human and Superman
 - C. to offer a solution for 5D data storage
 - D. to inform the development of a new digital-data storage technology
37. Which of the following statements is NOT true?
- A. The digital data stored in the new technology can remain for a long time.
 - B. The high-technology used in the new digital-data storage is perceptible to human eyes
 - C. The digital data stored can only be read by special ocular devices
 - D. The scientists presenting the technology are seeking funding to produce and sell the technology

38. According to Peter Kazansky, the technology can _____.

- A. help the preservation of human cultures
- B. make considerable profits in high-tech industry
- C. lead to a great debate of issues regarding privacy
- D. store a large amount of data within a second

39. The word **encode** is closest in meaning to _____.

- A. disguise
- B. sneak
- C. encrypt
- D. exchange

The World Health Organization (WHO) has **backed** trials of genetically modified (GM) mosquitoes that could be used in the fight against the Zika virus. The WHO also said sterile irradiated male mosquitoes could also be released to mate with wild females. However, environmentalists have warned over the possible consequences of wiping out an entire species. Zika has been linked to microcephaly in babies, who are born with damaged brains and abnormally small heads. In a statement, the WHO said it was encouraging affected countries "to boost the use of both old and new approaches to mosquito control as the most immediate line of defense".

Initial trials using genetically modified mosquitoes developed by Oxitec, the British subsidiary of Intrexon, have been taking place in the Cayman Islands and Brazil. The mosquitoes are altered so that their offspring will die before reaching adulthood and being able to reproduce. Another technique under consideration involves releasing male mosquitoes that have been sterilized by low doses of radiation. **It** has already been used by the International Atomic Energy Agency (IAEA) to control insects that damage crops.

A third option uses Wolbachia bacteria, which do not infect humans but prevent the eggs of infected female mosquitoes from hatching. Mosquitoes carrying Wolbachia have already been released to reduce dengue fever and the WHO said large-scale trials would be carried out. The WHO has declared Zika a global emergency, although definitive proof of a link to birth defects has not yet been established. Scientists in Brazil say they have found more evidence of a link. Brazil has about 460 confirmed cases of microcephaly and is investigating about 3,850 suspected cases. The virus has spread throughout Latin-America, but Brazil has been hardest hit. (Source: Zika virus: WHO backs GM mosquito trials, *BBC News*, February 16, 2016)

40. The word **backed** is closest in meaning to _____.

- A. controlled
- B. concealed
- C. revealed
- D. supported

41. Environmentalists warned that releasing genetically modified (GM) mosquitoes may result in_____.

- A. the successful control of Zika virus
- B. the wider spread of dengue fever
- C. the eradication of mosquitoes
- D. the cause of global economic recession

42. In the second paragraph, **it** refers to _____.

- A. the method of freeing low-dosed radiated male mosquitoes
- B. the technology to alter female mosquitoes
- C. the method of preventing infected eggs from hatching
- D. the way of finding evidence linking to microcephaly

43. How are *Wolbachia bacteria* used?

- A. They are used to control the incubation of eggs from diseased female mosquitoes.
- B. They are the major food resources for pregnant female mosquitoes.
- C. They are used as the proof s of dengue fever reduction
- D. They are used to help establish the link birth defects and Zika virus in Brazil.

44. Which of the following statements is TRUE?

- A. It has been proven that Zika is not the cause of microcephaly in babies.
- B. In Brazil, 3,850 cases of microcephaly have been confirmed and 460 suspected cases are still under investigation.
- C. Among the countries in Latin-America, Brazil is the one encountering the most serious Zika infection.
- D. The WHO has not declared Zika a global problem, despite many proofs of a link to birth defects has been established.

Although the number of people moving out of Hong Kong has been declining, the number of people applying to move to Taiwan has surged sharply, according to data from Hong Kong and Taiwanese authorities. The latest Hong Kong Security Bureau statistics showed that 4,900 people emigrated from Hong Kong to Canada, Australia and the US last year, the lowest figure in nearly a decade. Those three countries are the most popular destinations for Hong Kong emigrants.

The data showed that 800 Hong Kongers emigrated to Canada last year, down from 1,000 the previous year, while the number for Australia declined 13 percent to 1,900. Emigrants to the US increased by 300 to 2,200. The bureau said that the figures represented only the numbers of people applying for police clearance certificates for their emigration bids and do not reflect the exact number of people who have managed to move overseas. Meanwhile, Taiwan gave the green light to 7,498 applications by Hong Kongers for residence **permits** last year, the highest in more than 20 years, according to statistics compiled by the National Immigration Agency. In that year along, 697 Hong Kongers acquired long-term resident certificates, the statistics released on Dec. 31 last year show.

A report in the Sing Tao Daily yesterday cited Cheung Ka-hei, head of the Hong Kong-based Goldmax Immigration Consulting Co, as saying that apart from the traditional emigration destinations, an increasing number of Hong Kongers have chosen Taiwan and other Asia-Pacific countries like Malaysia as their future homes. Cheung said that last year's Occupy Central movement, which aimed to press the Chinese government into allowing an electoral system in Hong Kong that meets international standards in terms of universal suffrage, prompted Hong Kongers to consider moving to Taiwan.

Meanwhile, the Chinese-language Apple Daily cited investment immigration consultant Eddie Kwan as saying that compared with the US and countries in Europe, the amount of investment required for those planning to move to Taiwan is relatively low, at about NT\$10 million (US\$313,700), a figure that Kwan said is affordable for most Hong Kongers. (Source: Taiwan attracting more emigrants from HK, *Taipei Times*, February 24, 2015)

45. Which of the followings is NOT true about Hong Kong?

- A. The number of people applying to move to Taiwan has increased dramatically.
- B. Canada, Australia and the US were the most popular destinations for Hong Kong emigrants.
- C. Last year, the number of people emigrating to Canada, Australia and the US decreased.
- D. The expenditure needed for emigration to Taiwan is cheap compared with the US and countries in Europe.

46. According to Cheung Ka-hei, what event triggered Hone Kongers' desire to move to Taiwan?

- A. The corruption of Communism in China
- B. The action for the demanding of a better and fairer voting system in Hong Kong
- C. The freer social-economic condition in Taiwan
- D. The movement for the demanding of more job opportunities in Hong Kong

47. The word **permits** is closest in meaning to _____.

- A. legalization
- B. favoritism
- C. partiality
- D. preference

More than a third of Americans say they're are not getting enough sleep, putting themselves at risk of obesity, heart disease and other issues, federal researchers said Thursday. The findings also suggest that more Americans need to learn healthy sleep

habits — like going to bed at regular times and turning off televisions and other electronic devices, the team at the Centers for Disease Control and Prevention said. "As a nation we are not getting enough sleep," said Dr. Wayne Giles, director of CDC's Division of Population Health.

"Lifestyle changes such as going to bed at the same time each night; rising at the same time each morning; and turning off or removing televisions, computers, mobile devices from the bedroom, can help people get the healthy sleep they need." CDC experts looked at health surveys covering more than 400,000 Americans. They were asked how many hours of sleep they get each night, among other questions. On average, only 65 percent said they get seven hours or more of sleep a night, the team reported.

"Sleeping less than seven hours per night is associated with increased risk for obesity, diabetes, high blood pressure, coronary heart disease, stroke, frequent mental distress, and all-cause mortality," the team wrote in the CDC's weekly report. People in Hawaii are the most likely to burn the candle at both ends, with just 56 percent of residents reporting an average of seven hours a night or more. South Dakotans have the best sleep record: 72 percent of people there said they sleep plenty. And only about half of blacks report they get enough sleep, compared to two-thirds of whites and Hispanics.

Sleep may also be tied to economic conditions. People in the Southeast and Appalachian regions reported the least sleep, on average. "Previous studies have shown that these regions also have the highest prevalence of obesity and other chronic conditions," the CDC team wrote. "People who reported they were unable to work or were unemployed had lower healthy sleep duration (51 percent and 60 percent, respectively) than did employed respondents (65 percent). The prevalence of healthy sleep duration was highest among people with a college degree or higher (72 percent)." Doctors need to ask about sleep, the CDC suggested.

"Employers can consider adjusting work schedules to allow their workers time to get enough sleep," CDC said. "Employers can also educate their shift workers about how to improve their sleep." The artificial lights in computer and television screens are a well documented cause of insomnia. And the CDC says that there's no real proven sleep aid, even though nearly 9 million Americans say they take sleeping pills. (Source: A third of Americans aren't getting enough sleep, NBC News, February 18, 2016)

48. According to CDC expertise, which of the followings is a good way to help people get the healthy sleep they need?

- A. Switch off the electronic devices
- B. Take sleeping pills before going to bed
- C. Drink milk before going to bed
- D. Maintain an irregular sleeping pattern

49. The Researchers in the CDC's weekly report suggested that sleeping less than seven hours per night may lead to?

- A. lung cancer
- B. infantile paralysis
- C. hepatitis B
- D. depression

50. People who are unemployed tend to _____.

- A. have nightmares during sleeping
- B. sleep unsoundly during the night
- C. go to bed late and get up early
- D. suffer from insomnia.