

科目：英 文(4003)

校系所組：中大認知與神經科學研究所

陽明神經科學研究所認知神經科學組

參考用

Part One: Vocabulary (30%) In each question, read and decide which of the four choices will most suitably complete the sentence. Mark your answer on your Answer Card.

請用 2B 鉛筆清楚將答案畫記在答案卡上

1. A good deal of the \_\_\_\_\_ for his achievement in this field must go to his supervisor, Professor Lee.  
A. credit                      B. respect                      C. fame                      D. result
2. The patient is not in good condition, so do not \_\_\_\_\_ your visit.  
A. inherent                      B. prolong                      C. tolerate                      D. obey
3. If you want to go to the concert, you'll have to make a \_\_\_\_\_, or there will be no tickets.  
A. compliment                      B. booking                      C. reservation                      D. contribution
4. The living room is so \_\_\_\_\_ with furniture that it's hard to move about.  
A. cluttered                      B. sparkling                      C. scattered                      D. overwhelming
5. Written at least 100 years ago, the handwriting faded and became \_\_\_\_\_.  
A. infinite                      B. illegible                      C. infectious                      D. degraded
6. We all have our \_\_\_\_\_ moments during which we think about what we have been doing to examine our souls.  
A. introspective                      B. extrovert                      C. intermediary                      D. extravagant
7. It was amazing that the magician \_\_\_\_\_ the chair without touching it physically.  
A. alleviated                      B. levitated                      C. deliberated                      D. legislated
8. I am not interested in Harry Potter Series because \_\_\_\_\_ can never convince me.  
A. chemicals and pharmacy                      B. witchcraft and science  
C. sorcery and spells                      D. neurology and astrology
9. To \_\_\_\_\_ racial prejudice is what we modern citizens need to do for better living of mankind.  
A. rekindle                      B. emigrate                      C. advertise                      D. eradicate
10. The government provides some \_\_\_\_\_ and loans for the young people with their studies.  
A. subsidy                      B. endorsement                      C. mortgages                      D. dignity
11. Experts say walking for 30 minutes three times a week is one of the best ways for a person to \_\_\_\_\_ healthy.  
A. preserve                      B. remain                      C. consider                      D. maintain
12. President Smith \_\_\_\_\_ that effective measures be taken to put an end to cheating in exams.  
A. intended                      B. urged                      C. persuaded                      D. baffled
13. If you call 911, they will \_\_\_\_\_ firemen, policemen, and paramedics immediately.  
A. acclaim                      B. resume                      C. dispatch                      D. exterminate
14. The worsening financial situation made it obvious that an economic depression was \_\_\_\_\_.  
A. overcome                      B. meticulous                      C. imminent                      D. impotent
15. Totally \_\_\_\_\_ the first part of the questions on the exam, he passed on to the second part.  
A. perplexed by                      B. severed by                      C. converted with                      D. sated with

Part Two: Sentence Structures and Written Expressions (30%) 文法句意選擇

16. That traffic accident occurred \_\_\_\_\_.  
A. five years ago                      B. five years before  
C. five years past                      D. before five years

注意：背面有試題

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17. I'd like to have dinner with you, but I have \_\_\_\_\_ to do tonight.  
A. many works    B. much work    C. many work    D. much works
18. Some novels by the author Dan Brown \_\_\_\_\_ on the best seller list.  
A. has been frequently    B. have frequently been  
C. had frequently    D. frequently have
19. I really have no \_\_\_\_\_ the present government.  
A. confident of    B. confidentiality for  
C. confidential about    D. confidence in
20. I wish that Mary \_\_\_\_\_ her work, but to my sadness, she didn't.  
A. is finishing    B. will    C. had finished    D. finishes
21. \_\_\_\_\_ you continue to smoke, your family will continue to be exposed to second-hand smoke.  
A. As long as    B. Unless    C. Notwithstanding    D. Although
22. Our goal is to make our coffee available \_\_\_\_\_ so it bursts into the national consciousness.  
A. where people shop, travel, play and work  
B. where people shopping, traveling, playing and working  
C. that people shop, travel, play and work  
D. for people shop, travel, play and work
23. \_\_\_\_\_ all data into electronic pulses.  
A. The computer input unit changes    B. Input changed, the computer unit has  
C. When changes the computer input unit    D. By changing the computer input unit
24. Scientists put forward the hypothesis \_\_\_\_\_ helps some trees to conserve water.  
A. When leaves lose    B. that losing leaves  
C. leaves are lost    D. when it loses leaves
25. \_\_\_\_\_ commonly seen as the first step to a successful business.  
A. Why strategic planning is    B. Strategic planning that is  
C. Strategic planning is    D. It is strategic planning
26. Professor Lin advanced the theory \_\_\_\_\_ always made money.  
A. who that had money    B. that those who had money  
C. that those people    D. those who that money has
27. Why do Mexican immigrants in Los Angeles tend to have more children \_\_\_\_\_ in Mexico City?  
A. than the impoverished peasants living    B. living in the impoverished peasants  
C. that impoverished peasants have    D. the impoverished peasants used to have
28. There are over eighty of the pyramids scattered along tile banks of the Nile, \_\_\_\_\_ from the true pyramids.  
A. because all are very different    B. but some of which are quite different  
C. and some of them are different    D. even though it is very different
29. Having seen the movie adapted form a Japanese novel, \_\_\_\_\_.  
A. it was very eager for him to read the novel  
B. the novel was read by him very eagerly  
C. eagerly reading the novel interested him  
D. he was eager to read the novel
30. Do you have any idea \_\_\_\_\_ in his present field?

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- A. how many years has your partner been working
- B. how long your partner has been working
- C. your partner has been working for how long
- D. how has your partner been working many years

## Part Three: Reading Comprehension (40%)

For questions 31-35, please read the following passage

Giant pandas are among the rarest mammals in the world—of the roughly 1,000 remaining pandas in the world, more than 120 live in captivity and 80 percent live in the southwestern province of Sichuan, China.

It is estimated that giant pandas now exist in about 40 isolated populations and that most of these contain fewer than 20 individuals.

The main threat to the survival of the giant panda is the destruction of their habitat. Cattle, sheep, and goats graze on any emerging seedlings and prevent regeneration of the forest. In the last 30 years Sichuan has lost some 30 percent of its forests, has been destroyed or disturbed so badly that it no longer provides suitable habitat for the panda. In addition, the demand for land and natural forest vegetation has been destroyed or disturbed so badly that it no longer provides suitable habitat for the panda. In addition, the demand for land and natural resources threatens the giant panda's existence. To offset this situation, the Chinese government has set aside 11 nature preserves where bamboo flourishes and giant pandas are known to live.

Giant pandas are also susceptible to poaching, as their dense fur carries a high price on the black market in East Asia, and the low reproductive capacity of the giant panda makes it more vulnerable to the threats, and less capable of rebounding from its low numbers.

Whatever the number of giant pandas surviving in the wild, it is quite clear that the giant panda will become extinct by the next century unless more steps are taken to protect its habitat.

31. According to the article, the number of pandas in the wild totals around \_\_\_\_.
- A. 70                      B. 120                      C. 800                      D. 1,000
32. Which of the following has NOT threatened the giant panda?
- A. Preserves              B. Low reproduction  
C. Poaching              D. Destruction of their habitat
33. The word "graze" in the second paragraph is closest in meaning to \_\_\_\_.
- A. plant                      B. destroy                      C. step                      D. eat
34. The word "poaching" in the third paragraph is closest in meaning to \_\_\_\_.
- A. escaping              B. illegal killing              C. sickness                      D. breeding
35. According to the author, the problems facing the giant panda are \_\_\_\_.
- A. unstoppable                      B. life-threatening  
C. caused by the environment              D. easy to solve

For Questions 36-40, please read the following passage

Our neurological profile essentially guides the way we teach our classes, meaning that left-brain teachers tend to teach in a "left-brain style," right-brain teachers typically teach in a "right-brain style," and middle-brain teachers tend to vary their teaching between the two approaches. As you evaluate

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your own teaching style, remember that none of these guidelines are set in stone, and that we do not always act according to our preferences. As we know, people are complex and so are their behaviors. Teachers tend to better reach students who share their same neurological strengths. A strong left-brain teacher, for example, will need to make a conscious effort in order to better reach the strong right-brain students in the classroom.

Teachers with left-brain strengths generally prefer to teach using lecture and discussion. To incorporate sequence, they put outlines on the board or overhead, and they like to adhere to prepared time schedules. They give problems to the students to solve independently. Teachers with left-brain preferences assign more research and writing than their right-brain peers. A reasonably quiet, structured classroom is preferred. The classroom tends to be clean, with items in their place. Left-brain students prefer to work alone. They like to read independently and incorporate research into their papers. They favor a quiet classroom without a lot of distraction.

Dorothy scores "strong left" on a brain preference test for children. Though Dorothy is not learning disabled, her right hemisphere is significantly weaker than her left. She has great difficulty understanding lessons with a visual-spatial orientation. Dorothy is also a perfectionist. When the fourth-grade teacher initiates an art project, Dorothy believes that she cannot do the work successfully. She is afraid to fail and consequently becomes nauseous. Seeing the nurse accomplishes two things: It gets her away from an unpleasant situation and gives her time to regroup herself prior to reading time.

36. Which of the following does the author tend to agree?
- A. The left brain teachers seem far better than their counterparts in teaching skills.
  - B. The left brain teachers cannot be welcome to the right brain students.
  - C. A left brain student tends to work independently even though there is a lot of distraction.
  - D. The left brain teachers better reach students who share the neurological preference similar to theirs
37. We can infer from the passage that \_\_\_\_\_.
- A. the author has something wrong with his/her neurological preference
  - B. a perfectionist is always a person of the left brain style
  - C. we are not determined to act in some fixed ways even though neurological preference surely casts certain effects on our behavior patterns
  - D. the understating of neurological preference in our behavior would be useful to the remedy of the panic in learning
38. The word "distraction" is synonymous to \_\_\_\_\_.
- A. diversion      B. dislocation      C. derangement      D. devoid
39. How would a strong left brain teacher respond if he/she wants to better reach the strong right brain students in the classroom?
- A. to avoid initiating eye contact      B. to keep alert and smile
  - C. to show him or her a lot of pictures      D. to make attentive efforts
40. What would be the best title for this passage?
- A. Teaching Orientation in View of Neurological Differences
  - B. A Discovery of Brain Functions
  - C. New Model of Teaching in Favor of Brain Preference
  - D. A New Approach of Brain Surgery

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For Questions 41-45, please read the following passage

The Sun was supposed to be the chief dispeller of ill-disposed ghosts, and because the rooster by its crowing announces the sunrise, it too was held to have power over the ghosts. Earthenware roosters were thought to have power to ward off demons and were placed on housetops and over gateways. The triumphant march of the season of spring was seen in peach blossoms. As a result, branches of peach trees, peach boards with mottoes drawn from the sayings of the sages inscribed on them, sheets of red paper in imitation of peach blossoms, and similar objects were nailed to doors and gates on Chinese New Year's Day. Bonfires, torches, candles, lanterns, and firecrackers scared off the ghost and effectually were used during popular festivals, especially on New Year's Day, when a general house-cleaning of dangerous spirits was effected.

41. Which of the descriptions is NOT true?
- The article seems to discuss certain customs in Chinese culture.
  - Most Chinese people seem to believe in the power of underworld spirits.
  - The article implies that in Chinese culture there exists an idea of the transcending God dictating all changes of the seasons.
  - Firecrackers are often used during festivals to dispel ghosts.
42. The Sun is very often symbolized in Chinese culture as \_\_\_\_\_.
- the source of power that drives away evil spirits
  - the inept downing force everyone is scared of
  - it goes in the middle way and threatens no one
  - it represents the mercilessness and brutality in Nature
43. The symbolical indication of the branches of peach trees put on the doors could have meant the same as \_\_\_\_\_.
- red sheet couplets
  - the cross in Christianity
  - the Buddha figures in Buddhism
  - the national flag
44. According to this passage, what does the rooster crowing signify?
- The rising of the earthly strength
  - The declining of the triumphant march of the season
  - The inevitable darkness in the end of the day
  - The sunrise that overcomes the evil
45. The word "motto" could be equivalent to \_\_\_\_\_.
- maxim
  - inscription
  - announcement
  - pictures

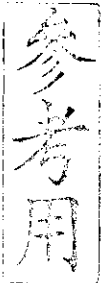
For Questions 46-50, please read the following passage

Queensland Brain Institute (QBI) neuroscientists at The University of Queensland have discovered a fundamental component of the process that regulates memory formation. QBI Director Professor Perry Bartlett said the discovery explains, for the first time, how new nerve cells form in an area of the



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brain associated with learning and memory – which is known to deteriorate in people with stroke and dementia.

“The hippocampus is the region of the brain involved in important brain functions such as learning and memory and loss of neuronal production in the hippocampus is associated with a range of neurodegenerative conditions, and is particularly evident in ageing dementia.” Professor Bartlett said. “Surprisingly, however, studies have so far failed to identify a resident stem cell population in the hippocampus that’s capable of providing the renewable source of these essential nerve cells.”

Research by Professor Bartlett and his QBI colleague Dr Tara Walker – which features on this week’s front cover of the Journal of Neuroscience (May 14) – has identified the resident stem cell in the hippocampus and, even more importantly, has discovered how it can be activated to produce new neurons.

According to Dr Walker, an understanding of the activation process should enable the development of therapeutics that can stimulate the production of new neurons and reverse or prevent the cognitive decline that occurs during ageing dementia. “These significant advances in determining the molecular regulation of nerve production will also have a major impact on our understanding of more complex areas such as behavior, cognition, neurological disease and mental illness,” she said.

46. What would be the best title for the report?
- Discovery of Cells Linked to Learning and Memory
  - How Memory Is Lost
  - The Loss of Hippocampus, Dementia, and Memory
  - The Mystery of Resident Stem Cell
47. The word “deteriorate” in the first paragraph could refer to \_\_\_\_\_.
- danger
  - smooth change
  - gradual damaging
  - bypass surgery
48. According to the report, what would be essential to the regeneration of nerve cells in hippocampus?
- to have neurological surgery
  - to exercise the brain
  - to develop cognition
  - to identify resident stem cell in hippocampus
49. Which of the following is not mentioned in the report?
- The understanding of some fundamental component in the process that regulates memory formation would have replaced cognitive and neurological sciences.
  - The loss of neuronal production in hippocampus may be associated with aging dementia.
  - The therapeutic production of neuronal cells in hippocampus is now verified feasible.
  - The stem cell in hippocampus has been identified by some scientists
50. The above mentioned scientific discovery would have impact on many fields EXCEPT \_\_\_\_\_.
- behavioral science
  - brain neurology
  - cognitive psychology
  - gynecology