

國立中山大學 103 學年度轉學考招生考試試題

科目名稱：英文【資管系三年級】

題號：742003

※本科目依簡章規定「不可以」使用計算機

共 5 頁第 1 頁

*This exam consists of 50 multiple-choice questions; 2 points for each correct answer.*

**A. Choose the best word(s) to complete each sentence**

1. John and I cannot settle \_\_\_\_ dispute.  
a. our                      b. my                      c. their                      d. his
2. If you \_\_\_\_ in my shoes you would have made the same mistake!  
a. wear                      b. were                      c. are                      d. could be
3. The YouTube video showed a cat \_\_\_\_ away a big dog that attacked a small boy.  
a. chasing                      b. to chase                      c. chased                      d. has chased
4. The \_\_\_\_ main problem will be how to face the challenges of the future.  
a. next generations      b. next's generation      c. next generation's      d. next's generations'
5. She was fired from her factory job because she could not \_\_\_\_ with her co-workers.  
a. stand by                      b. make do                      c. go through                      d. keep up
6. Go on eating junk food all day \_\_\_\_ you'll have high blood pressure before you're 30!  
a. and                      b. but                      c. however                      d. although
7. Having made home work all night, it was very \_\_\_\_ that Jacqueline was very tired.  
a. sleepy                      b. difficult                      c. obvious                      d. late
8. What a beautiful, quiet night! The stars are shining and it is so wonderfully \_\_\_\_ here!  
a. morbid                      b. serene                      c. murky                      d. morose
9. I am absolutely \_\_\_\_: I haven't had a bite to eat all day!  
a. exhausted                      b. parched                      c. desiccated                      d. famished
10. If I \_\_\_\_ a car then, I would not have had to ask Karola to pick me up from work.  
a. had                      b. had had                      c. would have                      d. will have
11. This weekend we're \_\_\_\_ Kenting: they have great beaches there.  
a. driving                      b. leaving                      c. headed for                      d. playing
12. I \_\_\_\_ to hand in my paper in time, Professor Geary.  
a. will                      b. should be able                      c. cannot                      d. assure
13. She invited me to her party \_\_\_\_ our recent quarrel.  
a. in spite of                      b. out of spite for                      c. spiteful of                      d. to spite
14. Our new neighbors \_\_\_\_ to be really nice.  
a. turn                      b. turned up                      c. have turned out                      d. turn down
15. Margaret \_\_\_\_ drinks in the kitchen when Alice arrived.  
a. makes                      b. is making                      c. was making                      d. has been making

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16. How can I \_\_\_\_\_ my father to understand that I don't want to work in his scrap metal business?  
a. make                      b. get                      c. talk to                      d. convince
17. Have you tried those macaroons? They're really \_\_\_\_\_!  
a. tasteful                      b. tasty                      c. taste delicious                      d. deliciously
18. Although he is in his sixties, \_\_\_\_\_ all his younger competitors.  
a. but he beat                      b. that he beat                      c. and he beat                      d. he beat
19. His teacher, \_\_\_\_\_ Karl had the greatest respect, was arrested for shoplifting.  
a. by whom                      b. whose                      c. to whom                      d. for whom
20. What an \_\_\_\_\_ thing to do, beating a defenseless animal!  
a. appalling                      b. appealing                      c. apparent                      d. awesome

**B. Choose the sentence that is grammatically correct**

21. a. As a speaker, William is more better than George.  
b. In speaking, William is more better than George.  
c. As a speaker, William is better than George.
22. a. However tiring the Sunflower protests were, it was also exhilarating.  
b. Although tiring, the Sunflower protests were also exhilarating.  
c. Although tiring the Sunflower protests were, they were also exhilarating.
23. a. Whereas we wanted to take the high speed train to Taipei; however, there were no more tickets.  
b. We wanted to take the high speed train to Taipei; conversely, there were no more tickets.  
c. We wanted to take the high speed train to Taipei; however, there were no more tickets.
24. a. John thought Angelina as good an actress than Jennifer.  
b. John thought Angelina better an actress as Jennifer.  
c. John thought Angelina as good an actress as Jennifer.
25. a. After a day's of hard work, a cold beer is always welcome.  
b. Because of a hard day's work, a cold beer is always welcome.  
c. After a day of hard work, he finds that a cold beer is always welcome.
26. a. His latest book a failure, the author vowed never to write again.  
b. His latest book failed, the author vowed never to write again.  
c. The author's latest book failed, he vowed never to write again.
27. a. It is the middle of the day: why not are you not in school?  
b. It is the middle of the day: why not are you in school?  
c. It is the middle of the day: why are you not in school?
28. a. What are you hope doing after leaving school?  
b. Which are your hopes to do when you leave school?

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- c. What are you hoping to do after you leave school?
29. a. Do you always go to Japan for your vacations?  
b. Did you always went to Japan on your vacations?  
c. Do you always be going to Japan on your vacations?
30. a. If it rains tomorrow I would ask my father to drive me to school.  
b. If it rained tomorrow I will ask my father to drive me to school.  
c. If it rained tomorrow I would ask my father to driver me to school.
31. a. My neighbor keeps her cat meow for hour and hours every day.  
b. Every day, for hours and hours, my neighbor lets her cat meowing.  
c. My neighbor keeps letting her cat meow every day, for hour and hours.
32. a. The Bannan line stabbings shocked people everywhere, not just in Taipei.  
b. The Bannan line stabbings shocked people in everywhere, not just Taipei.  
c. The Bannan line stabbings shocked people everywhere, but not just in Taipei.
33. a. Where he lives there is no sewers nor electricity.  
b. Where he lives, there are no sewers or no electricity.  
c. Where he lives there is neither sewers nor electricity.
34. a. More than her death, the heroine of this novel fears losine her virtue.  
b. More than her life, the heroine of this novel fears losing her virtue.  
c. More than dying, the heroine of this novel loses her virtue.
35. a. The poor man took a pay cut to not be fired.  
b. Notwithstanding taking a pay cut, but the poor man was still fired.  
c. The poor man took a pay cut not to being fired.

**C. Choose the word or phrase most closely related to the target word or phrase**

36. readily  
a. without reluctance      b. without preparation      c. without seriousness
37. scornful  
a. painful      b. contemptuous      c. nutritious
38. to stall  
a. to delay      b. to make strong      c. to support
39. eyesore  
a. photographic lens      b. disease of the eye      c. ugly object
40. to omit  
a. to leave out      b. to let in      c. to allow
41. worthwhile

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- a. deserving to spend time on    b. something timely    c. a waste of time
42. moderately successful  
a. not successful                      b. very successful                      c. quite successful
43. to fare well  
a. to say goodbye                      b. to be lucky                      c. to travel at a discount
44. to take up an offer  
a. to decline it                      b. to accept it                      c. to think about it
45. careworn  
a. weary                      b. well-groomed                      c. careful

## D. Choose the answer that best reflects the meaning of the text

Many Chinese museums open with a fine first exhibition, but are soon as empty as swimming pools without water. Museum founders are good at what they do, so good that for the past few years a new museum has opened every day in China. But keeping them going, they say, is more difficult. Putting together collections, training curatorial staff, and planning inspired exhibition programs all but defeats them.

(Adapted from: *The Economist*, May 24, 2014).

46. After a fine first exhibition, many Chinese museums  
a. have no worthwhile own collections to show  
b. are converted to swimming pools  
c. go bankrupt for a lack of visitors  
d. are as useless as swimming pools without water
47. Museum founders are good at what they do,  
a. because they open a new museum every day  
b. because they can manage them even without the availability of water  
c. so that they know how to make their museums successful  
d. but, once founded, they have difficulty to make museums successful
48. Museum founders  
a. can train curatorial staff and put together collections, but cannot plan inspired programs  
b. plan inspired exhibition programs, but cannot put collections together for lack of curatorial staff  
c. have great difficulty in forming collections, educating museum staff, and mounting brilliant exhibitions  
d. are defeated by governmental curators and protests inspired by collectivist programs

“Lenovo is the best company in the world at balancing innovation and efficiency,” according to Yang Yuanqing, the chairman of the Chinese computer-maker. The boast is at least half right. The firm has certainly displayed its ruthless efficiency of late, by keeping costs down and grabbing market share from its big Western rivals. Lenovo has recently bested HP to become the top peddler of desktop computers worldwide. From a negligible share a few years ago, it is rising fast in the global smartphone market too.

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(Adapted from: *The Economist*, May 24, 2014).

49. Chairman Yang Yuanqing's boast is at least half right because Lenovo
- a. has ruthlessly grabbed market share from its Western rivals
  - b. is rising fast in the global smartphone market as well
  - c. is indeed an extremely efficient company
  - d. is a company that balances innovation and efficiency
50. Lenovo has recently
- a. beaten HP as top seller of desktop computers worldwide
  - b. bought up HP's division of desktop computer manufacture
  - c. taken over HP's division of desktop computer maintenance and repair
  - d. beaten HP as an innovative company

**End of the Transfer Exam English**

# 國立中山大學 103 學年度轉學考招生考試試題

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## A. Multiple Choice (單選題) 30%

- Which of the following data structures is LIFO (Last-in, First-out)?
  - Array
  - Stack
  - Queue
  - Tree
- Let  $N$  be an arbitrary natural number with  $N > 1$ . Which one of the following statement is FALSE?
  - A binary tree of height  $N$  may have  $N + 1$  nodes.
  - A binary tree of height  $N$  may have  $N^2$  nodes.
  - A binary tree of height  $N$  may have  $2^N$  nodes.
  - A binary tree of height  $N$  may have  $N!$  nodes.
- If the expression  $((a+b) * c + d * (e + f) * g) + h$  is evaluated with 8 having precedence over  $+$ , then the value obtained is the same as the value of which of the following prefix expressions?
  - $++ * + a b c * * d + e f g h$
  - $+ * ++ a b c * * d + e f g h$
  - $+ * + * a b c ++ d * e f g h$
  - $* +++ a b c * * d * e f g h$
- Of the following sorting algorithms, which has a running time that is LEAST dependent on the initial ordering of the input?
  - Quick sort
  - Merge sort
  - Insertion sort
  - Shell sort
- Which one is a common deployment model for cloud services?
  - Public cloud
  - Private cloud
  - Hybrid cloud
  - All of the above.
- Which of the following is true about Distributed Denial of Service Attacks (DDoS)?
  - They are orchestrated attacks against a target system carried out over networks by using many connected systems that were taken control of by malicious hackers.
  - They are carried out via email by sending messages with viruses in the attachment.
  - They are carried out via email by sending official-looking spam to consumers in an attempt to convince them to reveal private information.
  - They represent initiatives from pure-play SaaS (Software-as-a-Service) firms to terminate the contracts of users that were caught violating the terms of the user license
- A \_\_\_\_\_ is a program/code that provides useful functionality to the end-user, does not replicate, but delivers a hidden, malicious payload (which may include activation of backdoors) on the computer after installation.
  - Computer virus
  - Spyware software
  - Trojan horse
  - Computer worm
- Which of the following is NOT true about RFID?
  - It stands for Random Frequency Identification
  - RFID tagging facilitates inventory tracking, and thus, it can improve upstream and downstream visibility in a supply chain
  - RFID technology exhibits read/write capabilities, and RFID tags can be reprogrammed
  - All of the above statements are true.
- Which of the following is most efficient for manipulating a list that contains integers and is of

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- predefined size?  
(A) Stack  
(B) Linked list  
(C) Array  
(D) Tree
10. In an 8-bit two's complement integer representation, the range of integers that can be represented is  
(A) -256 ~ +256  
(B) -127 ~ +127  
(C) -128 ~ +127  
(D) 0 ~ 256
11. Which of the following statements about virtual memory is NOT true?  
(A) Virtual memory is limited by the amount of RAM a machine has.  
(B) Virtual memory is a memory management technique that is implemented using both hardware and software.  
(C) Using the technique of paging may slow down useful work.  
(D) The primary benefits of virtual memory include freeing applications from having to manage a shared memory space and increased security due to memory isolation.
12. Which of the following statements about object-oriented programming is NOT true?  
(A) The goals of object-oriented programming increased understanding, ease of maintenance, and ease of evolution.  
(B) SQL is an example of object-oriented programming languages.  
(C) An approach to designing modular, reusable software systems.  
(D) A programmer can simply create a new object that inherits many of its features from existing objects.
13. The transport layer is responsible for delivering data to the appropriate application process on the host computers. Which of the following protocol is NOT placed in the transport layer?  
(A) Transmission Control Protocol  
(B) User Datagram Protocol  
(C) Datagram Congestion Control Protocol  
(D) Domain Name System
14. Which of the following statements concerning peer-to-peer (P2P) networks is FALSE?  
(A) A P2P network is the most common example of a locally controlled network.  
(B) Peer-to-peer networks cost more than client/server networks and are more difficult to maintain.  
(C) Each node on a peer-to-peer network can communicate directly with every other node on the network.  
(D) Members in a P2P network can share resources without going through a separate server computer.
15. Give integer variable  $x = 22$  and  $y = 7$ , which statement will output "22/7 is approximately 3.14" exactly?  
(A) `print "%d / %d is approximately %.f" % (x,y,float(x)/float(y))`  
(B) `print "%d / %d is approximately %.2f" % (x,y,x/y)`  
(C) `print "%2d / %d is approximately %.2f" % (x,y,float(x)/float(y))`  
(D) `print "%2d / %2d is approximately %.2f" % (x,y,x/y)`

## B. Short Answer 70%

1. Please define the following terms. 20%

(a) network topology (b) queue (c) linked list (d) call by reference (e) call by value

2. Consider the following C-like program.

```
#include <studio.h>
main ()
```

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```
{
float sum = 0.0, j = 1.5, i = 3.0;
while (i/j > 0.001)
{
j = j + j;
sum = sum + i/j;
print ("f\n", sum);
}
}
```

- (a) How many lines of output does the program produce? Please show each line of output. 10%  
(b) What is the integer that best approximates the last number printed? 5%

3. (1) Draw the graph that corresponds to this adjacency matrix 10%

	1	2	3	4	5	6
1	0	1	0	0	1	1
2	1	0	1	1	0	1
3	0	1	0	1	0	0
4	0	1	1	0	1	1
5	1	0	0	1	0	1
6	1	1	0	1	1	0

(2) Perform DFS (Depth First Search) and BFS (Breadth First Search) to search the graph you draw in the above question 10%

4. The Fibonacci sequence is a series of numbers where a number is found by adding up the two numbers before it. Starting with 0 and 1, the sequence goes 0, 1, 1, 2, 3, 5, 8, and so forth.

- (a) What is the 10th number of a Fibonacci sequence starting with 0 and 1? 3%  
(b) Using your preferred programming language, e.g. C or Java, to write a recursive program to calculate the  $n^{\text{th}}$  Fibonacci number. 10%  
(c) Please evaluate the time complexity of your recursive program. 2%