

## 315 基础英语（含阅读与写作）

### 2006 年研究生基础英语考试题

#### I. Grammar and Structure. (10 scores)

1. The fact that space exploration has increased dramatically in the past thirty years \_\_\_\_\_.  
 (A) is an evidence of us wanting to know more of our solar system  
 (B) is how we want to learn more about the solar system  
 (C) indicates that we are very eager to learn all we can about our solar system  
 (D) is pointing to evidence of our intention to know a lot more about what is called our solar system
2. The committee has met and \_\_\_\_\_.  
 (A) they have reached a decision  
 (B) it has formulated themselves some opinions  
 (C) its decision was reached at  
 (D) it has reached a decision
3. Having been served lunch, \_\_\_\_\_.  
 (A) the problem was discussed by the members of the committee  
 (B) the committee members discussed the problem  
 (C) it was discussed by the committee members the problem  
 (D) a discussion of the problem was made by the members of the committee
4. The chairman requested that \_\_\_\_\_.  
 (A) the members studied more carefully the problem  
 (B) the problem was more and carelessly studied  
 (C) with more carefulness the problem could be studied  
 (D) the members study the problem more carefully
5. Mr. Brown was concerned that his unpopular position \_\_\_\_\_ a disastrous effect on his career.  
 (A) could be  
 (B) might have  
 (C) had been  
 (D) would be
6. He explanation made the problem \_\_\_\_\_.  
 (A) even more complicated  
 (B) to be even more complicated  
 (C) that it became even more complicated

(D) being even too more complicated

7. \_\_\_\_\_, it will have an effect on the drinker.

(A) Nevertheless mild wine seems

(B) Even though mild wine seems

(C) Unless mild wine seems

(D) However mild wine seems

8. He told me \_\_\_\_\_ would come, but only a few turned up.

(A) many Linda friends

(B) many Linda's friends

(C) many of Linda's friends

(D) many friends of Linda

9. Richard was asked to withdraw from graduate school because \_\_\_\_\_.

(A) they believed he was not really able to complete the research

(B) he was deemed incapable of completing the research

(C) it was decided that he was not capable to complete the research

(D) his ability to finish the research was not believed or trusted

10. A major problem in the construction of new buildings \_\_\_\_\_.

(A) is that windows have been eliminated while air conditioning systems have not been perfected

(B) is they have eliminated windows and still don't have good air conditioning

(C) is because windows are eliminated but air conditioners don't work good

(D) is dependent on the fact while they have eliminated windows, they are not capable to produce efficient air conditioning systems

11. Animal watchers point out that the rabbit chews down trees to get food and material \_\_\_\_\_ its home.

(A) with that to build

(B) with which to build

(C) which to be built in

(D) which to build in

12. Schools often have \_\_\_\_\_ atmosphere, with its timetables and disciplines, to allow him much time for independent assessment of the work he is asked to do.

(A) too restricting an

(B) so restricting an

(C) too restricted an

(D) so restricted an

13. Advertising is distinguished from other forms of communication in that the advertiser pays for the message \_\_\_\_\_.

- (A) having been delivered
- (B) being delivered
- (C) to be delivered
- (D) to deliver

14. "Do you regret paying five hundred dollars for the painting?" "No, I would gladly have paid \_\_\_\_\_ for it."

- (A) twice so much
- (B) twice as much
- (C) much as twice
- (D) so much twice

15. When the lights came on again, hardly a person in the city \_\_\_\_\_ on a switch without reflecting how great a servant he had at his finger-tips.

- (A) need have turned
- (B) should have turned
- (C) must have turned
- (D) can have turned

16. In our work it's \_\_\_\_\_ unusual to be confronted with failures but we should in no way be discouraged on that account.

- (A) something
- (B) nothing
- (C) anything
- (D) everything

17. You haven't learned the word-order in spoken questions yet but I'm sure you \_\_\_\_\_ it before the end of this week.

- (A) have learned
- (B) will learn
- (C) will have learned
- (D) will be learning

18. Even in the days of smoky, coal-burning engines, trains made their own ventilation \_\_\_\_\_ pushing and pulling air through tunnels.

- (A) by
- (B) for
- (C) with
- (D) in

19. Today's consumers buy, enjoy, use and discard more types of goods \_\_\_\_\_ could possibly have been imagined even a few years ago.

- (A) that
- (B) as
- (C) but
- (D) than

20. I'd just as soon you \_\_\_\_\_ by plane because I think you will have to get there in time for the conference which is to be held tomorrow morning.

- (A) would go
- (B) will go
- (C) went
- (D) should go

## II. Reading Comprehension (25 scores)

(1)

Many objects in daily use have clearly been influenced by science, but their form and function, their dimensions and appearance, were determined by technologists, designers, inventors, and engineers --- using nonscientific modes of thought. Many features and qualities of the objects that a technologists thinks about cannot be reduced to unambiguous verbal descriptions; they are dealt with in the mind by a visual, nonverbal process. In the development of western technology, it has been nonverbal thinking, by and large, that has fixed the outlines and filled in the details of our material surroundings. Pyramids, cathedrals, and rockets exist not because of geometry or thermodynamics, but because they were first a picture in the minds of those who built them.

The creative shaping process of a technologist's mind can be seen in nearly every artifact that exists. For example, in designing a diesel engine, a technologist might impress individual ways of nonverbal thinking on the machine by continually using an intuitive sense of rightness and fitness. What would be the shape of the combustion chamber? Where should the valves be placed? Should it have a long or short piston? Such questions have a range of answers that are supplied by experience, by physical requirements, by limitations of available space, and by a sense of form. Some decisions, such as wall thickness and pin diameter, may depend on scientific calculations, but the non-scientific component of design remains primary.

Design courses, then, should be an essential element in engineering curricula. Nonverbal thinking, a central mechanism in engineering design, involves perceptions, which is indispensable for an artist. Because perceptive processes are not assumed to need "hard thinking," nonverbal thought is sometimes seen as a primitive stage in the development of cognitive processes and is inferior to verbal or mathematical thought. But it is paradoxical that when the staff of the Historic



American Engineering Record wished to have drawings made of machines and isometric views of industrial processes for its historical record of American engineering, the only college students with the requisite abilities were not engineering students, but rather students attending architectural schools.

If courses in design, which in a strongly analytical engineering curriculum provide the background required for practical problem-solving are not provided, we can expect to encounter silly but costly errors occurring in advanced engineering systems. For example, early models of high-speed railroad cars loaded with sophisticated controls were unable to operate in a snowstorm because a fan sucked snow into the electrical system. Absurd random failures that plague automatic control systems are not merely trivial errors in mechanical design, they are a reflection of chaos caused by the neglect of nonverbal thinking.

21. The main purpose of the author in writing this passage is \_\_\_\_\_.
- (A) to propose a new role for nonverbal thinking in the development of technology
  - (B) to stress the importance of nonverbal thinking in engineering design
  - (C) to identify the two kinds of thinking that are used by technologists
  - (D) to criticize engineering schools for neglecting for nonscientific models for design
22. According to the passage, when a technologist designs an object he \_\_\_\_\_.
- (A) draws the outline first and then fill it with details
  - (B) first has in mind what it should be like
  - (C) reduces it to unambiguous verbal description
  - (D) sees it as a visual, nonverbal process
23. The second paragraph is written to illustrate that \_\_\_\_\_.
- (A) engineering design involves a very complicated process
  - (B) creating thinking is primary in engineering design
  - (C) engineering design needs an intuitive sense of rightness and fitness
  - (D) nonverbal thinking plays an important role in engineering design
24. The author describes the predicament faced by the Historic American Engineering Record as “paradoxical” most probably because \_\_\_\_\_.
- (A) architectural students could use nonverbal thinking better than engineering students
  - (B) only college students had the requisite abilities while practicing engineers were not
  - (C) the drawings required were too complicated for engineers to make
  - (D) engineering students were not trained to make drawings needed in their own discipline
25. The author uses the example of the early models of high-speed railroad cars primarily to indicate that \_\_\_\_\_.
- (A) lack of attention to the nonscientific aspects in design results in poor conceptualization by engineers

- (B) neglect of trivial problems in mechanical design often causes costly errors in engineering systems
- (C) designers of automatic control systems need have a better understanding of analytical problems
- (D) design of modern engineering systems depends more on nonscientific than on scientific thinking

(2)

Before 1965 many scientists pictured the circulation of the ocean's water mass as consisting of large, slow-moving currents, such as the Gulf Stream. That view, based on 100 years of observations made around the globe, produced only a rough approximation of the true circulation. But in the late 1960s, researchers began to employ newly developed techniques and equipment, including subsurface floats that move with ocean currents and emit identification signals and ocean-current meters that record data for months at fixed locations in the ocean. These instruments disclosed an unexpected level of variability in the deep ocean. Rather than being characterized by smooth, large-scale currents that change seasonally, the seas are dominated by what oceanographers call mesoscale fields: fluctuating, energetic flows whose velocity can reach ten times the mean velocity of the major currents.

Mesoscale phenomena --- the oceanic analogue of weather systems ---- often extend to distances of 100 kilometers and persist for 100 days (weather systems generally extend about 1,000 kilometers and last 3 to 5 days in any given area). More than 90 percent of the kinetic energy of the entire ocean may, in fact, play a significant role by mesoscale variability rather than by large-scale currents. Mesoscale phenomena may, in fact, play a significant role by mesoscale variability air-sea interactions, and far-reaching climatic events such as El Niño, the atmospheric-oceanic disturbance in the equatorial Pacific that affects global weather patterns.

Unfortunately, it is not feasible to use conventional techniques to measure mesoscale fields. To measure them properly, monitoring equipment would have to be laid out on a grid point at intervals of at most 50 kilometers, with sensors at each grid point lowered deep in the ocean and kept there for many months. Because using these techniques would be prohibitively expensive and time-consuming, it was proposed that tomography be adopted to measure the physical properties of the ocean. In medical tomography, x-rays map the human body's density variations; the information from the x-rays, transmitted through the body along many different paths, is recombined to form three-dimensional images of the body's interior. It is primarily this multiplicative increase in data obtained from the multi-path transmission of signals that accounts for oceanographers' attraction to tomography: it allows the measurement of vast areas with relatively few instruments. Researchers reasoned that low-frequency sound waves, because they are so well described mathematically and because even small perturbations in emitted sound waves can be detected, could be transmitted through the ocean over many different paths and that the properties of the ocean's interior ---- its temperature, salinity, density, and speed of currents ---- could be deduced on the basis of how the ocean altered the signals, their initial trials were highly successful, and ocean acoustic tomography was born.

26. The passage mainly talks about \_\_\_\_\_.
- (A) relation between ocean and weather  
 (B) theories of ocean current  
 (C) mesoscale phenomena of the ocean  
 (D) measurement of physical properties of the ocean
27. The mesoscale fields are characterized by all the following features except \_\_\_\_\_.
- (A) strong variable currents  
 (B) huge coverage of ocean water  
 (C) production of most of the ocean's kinetic energy  
 (D) interactions with atmosphere
28. Which of the following would be true if the ocean's circulation consisted primarily of large, slow-moving currents as is suggested in the passage?
- (A) The ocean currents would exhibit more variability than is actually observed.  
 (B) Atmospheric-oceanic disturbances such as EI Nino would occur more often.  
 (C) The velocity of the ocean current would not flow slowly.  
 (D) The effect of the ocean on global weather patterns would not be great.
29. What interests oceanographers in adopting tomographic technology for the measurement of the ocean's properties?
- (A) It provides the information transmitted from different parts of the ocean.  
 (B) It needs few interments to measure in the vast areas of the ocean.  
 (C) It applies low-frequency sound waves in the measurement.  
 (D) It is superior to x-rays in producing three-dimensional images.
30. One of the advantages of ocean acoustic tomography is that \_\_\_\_\_.
- (A) signals transmitted through sound waves can not be readily altered.  
 (B) sound waves can be detected even when there are great ocean current variations.  
 (C) low-frequency sound waves can be interpreted in a mathematical term.  
 (D) three-dimension images of the ocean can be shown by using X-rays.

### III. Error Correction (20 scores)

31. Living here for seven year, my friend is used to speaking English with all her classmates.
- A                      B                                      C                                      D
32. We can no more live a solitary life than can a bee; we are obliged as species, to rely on
- A                                      B                                      C                                      D
- each other.

33. Unfortunately, the industrialized we become the farther away we move from direct contact

A

B

with plants, and the less distinct our knowledge of botany grows.

C

D

34. Mary usually arrives at the office at nine o'clock, but because of the storm, she was

A

B

C

two hours later.

D

35. A history of more than four thousand years the drum is one of the oldest and most

A

B

widely used musical instruments.

C

D

36. Although the danger that he might be injured, Boris bravely entered the burning house

A

B

C

in order to save the youngsters.

D

37. The majority of the population in some African countries suffer malnutrition.

A

B

C

D

38. In addition to departmental and interdepartmental academic programs, instruction in

A

Aerospace Studies, Military Science, and Naval Science are offered to all eligible students.

B

C

D

39. A typical loam soil feels smoothly and is somewhat sticky.

A

B

C

D

40. The French language, which was to form the vehicle of a great literature, arose directly

A

B

out of the popular Latin spoken by the Roman conquerors of Gaul.

C

D

41. In spite of the tenants' objections, the apartment manager decided to rise the rent

A

B

C

by forty dollars per month.

D

42. Expected noises are usually more tolerant than unexpected ones of the magnitude alike.

A

B

C

D

43. As a resident of New Mexico, Dennis Chavez was elected the House of Representative

A

B

C

in 1930.

D

44. If children were fed nourishing breakfasts before they left for school, there would be

A

B

C



- less problems in the early morning classes.
- D
45. The explanation for the explosive force of volcanoes lays in the pressure of
- A B C
- the gases imprisoned within the molten rock.
- D
46. Whenever students asked for help or guidance, the counselor would advise them
- A B
- or refer them to someone who will.
- C D
47. When it comes to modify the landscape in a major way, the beaver ranks second only
- A B
- to humans among all living creatures.
- C D
48. As a means of perceiving the environment by bouncing high-frequency sounds off
- A B C
- objects, they interest scientists in many disciplines.
- D
49. The need for a well-grounded education was an idea supported by the Greeks
- A B C
- in time of Socrates.
- D
50. After checking out the motor and the carburetor for problems, Jesse found that the
- A B
- noise was caused by a lose fan belt.
- C D

#### IV. Translate the following from English into Chinese. (25 scores)

How can you buy or sell the sky or the warmth of the land? The idea is a strange one. If we do not own the freshness of the air and the sparkle of the water, how can you buy them? Every part of this earth is sacred to my people. Every shining pine needle, every sandy shore, every mist in the dark woods, every clearing and humming insect is holy in the memory and experience of my people. The sap which courses through the trees carries the memories of the red man. The white man's dead forget the country of their birth when they go to walk among the stars. Our dead never forget this beautiful earth, for it is the mother of the red man. The perfumed flowers are our sisters; the deer, the horse, the great eagle, these are our brothers. The rocky crests, the juices in the meadows, the body heat of the pony, and man ----- all belong to the same family.

#### V. Translate the following from Chinese into English. (30 scores)

我们的先哲通过观察宇宙万物的变动不居，提出了“天行健，君子以自强不息”的思想，成为激励中国人民变革创新、努力奋斗的精神力量。中国古代文明的发展，是中华民族艰苦奋斗、自强不息的结果。近百年来，为了摆脱半殖民地半封建的历史境遇，中国人民进行了艰苦卓绝、奋发图强的斗争。中国民主革命的先行者孙中山首先提出“振兴中华”的口号，他领导的辛亥革命，推翻了在中国延续几千年的君主专制制度。在毛泽东思想指引下，中国共产党领导中国人民实现了民族独立和人民解放，并把中国建设成为初步繁荣昌盛的社会主义国家。今天，在邓小平理论指引下，我国人民坚定不移地实行改革开放，在现代化建设中取得举世瞩目的成就。中国进入了百年来发展最快最好的历史时期。

**VI. Write about 400 words on the topic given below: (40 scores)**

**ON SUSTAINABLE DEVELOPMENT**

