

※ 考生請注意：本試題不可使用計算機。請於答案卷(卡)作答，於本試題紙上作答者，不予計分。

**Part 1: (70%) Choose one answer for each questions. 2 points for each question**

**Section 1—Choose the answer for each blank that best fits the meaning of the sentence as a whole.**

1. The flow rate \_\_\_\_ the surface tension and viscosity of the liquid as well as the dimensions of the capillary.  
(A) is determined by (B) determines (C) was determined (D) determind by (E) determined
2. This is believed \_\_\_\_ the reduced oxidation of metal in the nitrogen atmosphere.  
(A) because (B) due (C) owing (D) caused (E) to be due to
3. This method is more sensitive \_\_\_\_ the quartz crystal microbalance technology.  
(A) contrast to (B) comparing (C) compared to (D) compare (E) contrasting
4. His boss undoubtedly \_\_\_\_ that practice makes perfect.  
(A) think of (B) thinks (C) thinks of (D) is thinking (E) think
5. Let me \_\_\_\_ this most recent paper as an example.  
(A) sight (B) site (C) cite (D) recite (E) sit
6. Viruses can be \_\_\_\_ only with a powerful electronic microscope such as SEM.  
(A) see (B) to see (C) having seen (D) seeing (E) seen
7. The legend of cloning used to appear in \_\_\_\_ is now China.  
(A) that (B) what (C) where (D) which (E) why
8. Scientists announced that more than 90% of the sequence of human \_\_\_\_ had been completed.  
(A) clone (B) organs (C) genome (D) production (E) reproduction
9. Jupiter, the fifth planet from the Sun and the largest planet within the Solar System, has \_\_\_\_ solid surface and is primarily composed of hydrogen with a small proportion of Helium.  
(A) not (B) no (C) top (D) good (E) nice
10. The use of a side-supported flexural-mode disk resonator-array to boost the power handling of the resonant tank is instrumental to allowing adequate oscillator performance \_\_\_\_ the implementation of low-temperature nickel material.  
(A) despite with (B) on despite of (C) despite to (D) despite (E) on despite with
11. Hydrogen is a chemical element \_\_\_\_ one proton and one electron.  
(A) that (B) has (C) having (D) have (E) to have
12. A car must be strong enough to support its own weight \_\_\_\_ the weight of the driver and passengers who use it.  
(A) as well (B) so well (C) as well as (D) so well as (E) so

**Section 2—Choose one answer that contains faulty English.**

13. Some business analysts argue that the American automobile industry is suffering because  
(A) (B)  
Congress will not impose heavier import duties, but others say that the cars themselves are inferior than  
(C) (D) (E)  
foreign competition.
14. Computers and other office equipment, which are being used more and more by businesses either can be  
(A) (B) (C) (D)  
purchased or leased.  
(E)
15. In the training session, the instructor mentioned that them who were unsure of what to do could always  
(A) (B) (C) (D) (E)  
ask the department head.
16. (A) Your hair is too long; it is right time you had a haircut.  
(B) This year, they harvested three times much as what they did last year.  
(C) Lisa was furious when she saw his boyfriend holding another  
(D) Despite buying a new computer, Terry still doesn't have
17. (A) The dog walked over to me with his tail wagging.  
(B) There is no denying that Leonardo da Vinci is indeed a versatile genius.  
(C) This morning, a flock of birds sat on a fence as if having waited for a long time.  
(D) Had Peter fastened his seat belt yesterday, he might not have so
18. (A) Should my sister call me, tell her I'm in the middle of the meeting.  
(B) To get rid of your headache, all you have to do is taking the magic pill.  
(C) Efficiently as the men build, the house will still take months to complete.  
(D) But for my mentor's support, I might have given up my decision on studying abroad.
19. (A) The more often you use your brains, the sharper you will be.  
(B) For me, nothing is more precious than parents' love in the world.  
(C) It wasn't until he lost the game did he realize the importance of practice.  
(D) My mother thinks it is essential that everyone in our family help with the household chores.
20. (A) Such my amazement was that I became speechless then.  
(B) Money isn't worth having if you don't know how to make good use of it.  
(C) Only when we gather strength to face obstacles can we succeed in real life.  
(D) She should have sensed my uneasiness, for she quickly glanced away and pretended nothing had happened.

**Section 3—Choose the best answer to match with each underlined word.**

21. An ice cream shop in Taichung has the most bizarre flavors-bitter gourd and pork jerky, among others.  
(A) ethnic (B) original (C) successive (D) peculiar (E) natural
22. Students will learn more when they are in classes out of choice, rather than out of coercion.  
(A) compulsion (B) acknowledgement (C) suspension (D) encouragement (E) curiosity
23. Mr. Johnson felt some apprehension about hiring Helen because she had little experience in sales..  
(A) destination (B) neutrality (C) comprehension (D) despair (E) misgivings
24. The design of the new building utilized the most advanced eco-friendly concept.  
(A) acquired (B) proposed (C) employed (D) urged (E) empowered
25. Several short duration investment solutions have been proposed.  
(A) term (B) long (C) lounge (D) end (E) terminal

**Section 4—Read the follow articles and answer the questions.**

I (source: <http://stu60912.pixnet.net/blog/category/503020>)

The uncanny valley is a hypothesis regarding the field of robotics. The theory holds that when robots or other copies of humans look and act almost like actual humans, it causes a response of revulsion among observers.

The term was coined by a roboticist Masahiro Mori. Mori states that as a robot is made ever-increasingly humanlike in its appearance and motion, the emotional response from an individual to the robot will become increasingly positive and empathic, until a point is reached beyond which the response quickly becomes that of strong disgust. However, as the appearance and motion continue to become less distinguishable from an individual, the emotional response becomes positive once more and approaches human-to-human empathy levels.

The truth of the uncanny valley was examined with one recent study. A group of five monkeys were shown three images: two different 3D monkey faces (realistic, unrealistic), and a real photo of a monkey's face. The time of eye-gazing was used as a proxy for the result. Since the realistic 3D monkey face had been looked for lesser time than the others, this indicated that the monkey participants found the realistic 3D face aversive, or otherwise preferred the other two images.

The concept of the uncanny valley is taken seriously by the film industry due to negative audience reactions to the animated humans. To avoid the uncanny valley as much as possible, animators will take some measures. For example, design elements should match in human realism. That is to say, if an animated character looks more human than its movement, this gives a negative impression. Animated humans may look uncanny when human and nonhuman elements are mixed, which are what animators must subside so that they can ensure most of the audience a pleasant experience of going to the movies.

26. According to Mori, when you see a robot continually becoming more like a human, how may your emotion change?
- (A) You may feel more and more comfortable from start to end.
  - (B) You may feel comfortable at first, and feel unpleasant at one point, but later come back to the comfortable status.
  - (C) You may feel unpleasant for a long time, but feel comfortable when the robot becomes totally the same as a human.
  - (D) You may feel unpleasant at first, but feel more and more comfortable after you get used to its transforming.
27. The time of eye-gazing was used as a proxy by the researchers to \_\_\_\_\_
- (A) select suitable monkeys to be in the experiment.
  - (B) help monkeys practice staring at things for a long time.
  - (C) judge whether the monkeys like the photos or not.
  - (D) avoid experimental errors in the experiment.
28. What can be inferred from this passage?
- (A) Not only human beings, but the other animals may experience the uncanny valley.
  - (B) You will experience the uncanny valley when you see a man in a costume of robots.
  - (C) We feel more empathy when we see robots than we see humans.
  - (D) Now animators can entirely avoid the uncanny valley problem in the animation.

II (Turkey Tug-of-War, NOV. 14, 2016 By Rebecca Katzman)

The upside-down V-shaped bone is actually called the furcula. It is an elastic bone located between a turkey's neck and its breast. Furcula means "little fork" in Latin. All birds have a wishbone. It helps support a bird as it flies.

For humans, though, the wishbone serves a more lighthearted purpose. At Thanksgiving, the tradition is for two people to hold one end of the bone, make a wish, and then tug. The winner is the person who ends up with the bigger piece. If you believe the legend, the winner's wish will come true. All birds, including turkeys, have a wishbone. The bone supports a bird in flight.

How did this bone-ripping tradition get started? The practice of making a wish on a bird's furcula dates back to the ancient Etruscans, a people who lived in what is today northern Italy. They believed birds were powerful and divine creatures. After killing a chicken, an Etruscan would leave the wishbone in the sun to dry. Passersby would pick it up, stroke it for good luck, and make a wish. That is how the furcula got the name "wishbone."

The Etruscans passed the ritual along to the Romans. Soon, the practice of making a wish on a chicken's furcula became popular in ancient Rome. According to legend, it was so widespread that there weren't enough chickens or wishbones to go around. So the Romans began breaking the wishbone in two. Now, twice as many people could make wishes.

Then the English picked up the tradition. In the 16th century, English settlers brought the

practice to the New World. There, they found an abundance of wild turkeys. So they starting using a turkey furcula for their wishes. Today a wishbone tug-of-war is as much a part of Thanksgiving as is gobbling down turkey smothered in gravy.

When it comes time to pull apart the wishbone, different people have different tactics for ending up with the biggest piece. But there are a few tips that may help you get the upper hand. First, make sure your hands are dry. Next, make sure you hold the wishbone the right way. Take it between your thumb and index finger and place your thumb as close to the center of the bone as possible. Finally, get some leverage. The more pressure you can apply to your side of the wishbone, the better chance you have of winning the battle.

Will your wish come true on Thanksgiving? Whether you end up with the larger or the smaller piece of the furcula is ultimately a matter of luck. But a tight grip probably could hurt.

29. What is the shape of the furcula?

- (A)  $\wedge$  (B) Y (C) U (D) V

30. Which is true about the article?

- (A) If you get the short piece, you will win the game.  
(B) Every bird has wishbone except turkeys.  
(C) Wishbone tug-of-war is a part of Thanksgiving day's activity.  
(D) If you want to win the game, your hand must be wet.

31. What is the correct order that the wishbone was used to make a wish?

- (A) the Etruscans → the English → the Romans  
(B) the English → the Etruscans → the Romans  
(C) the Etruscans → the Romans → the English  
(D) the Romans → the English → the Etruscans

32. How did ancient Etruscans make wishbone?

- (A) Put the furcula from the chicken in a bottle to dry it.  
(B) Put the furcula from the chicken under the sun to dry it.  
(C) Break the furcula from the turkey into two pieces and dry it in the house.  
(D) Pull apart the furcula from the turkey and put it under the sun.

### III

(from TIME Magazine: You — Yes, You — Are TIME's Person of the Year, Dec. 25, 2006 By Lev Grossman)

The "Great Man" theory of history is usually attributed to the Scottish philosopher Thomas Carlyle, who wrote that "the history of the world is but the biography of great men." He believed that it is the few, the powerful and the famous who shape our collective destiny as a species. That theory took a serious beating this year. To be sure, there are individuals we could blame for the many painful and disturbing things that happened in 2006. The conflict in Iraq only got bloodier and more entrenched. A vicious skirmish erupted between Israel and Lebanon. A war dragged on in Sudan. A tin-pot dictator in North Korea got the Bomb, and the President of Iran wants to go nuclear too. Meanwhile nobody fixed global warming, and Sony didn't

make enough PlayStation 3s.

But look at 2006 through a different lens and you'll see another story, one that isn't about conflict or great men. It's a story about community and collaboration on a scale never seen before. It's about the cosmic compendium of knowledge Wikipedia and the million-channel people's network YouTube and the online metropolis MySpace. It's about the many wresting power from the few and helping one another for nothing and how that will not only change the world, but also change the way the world changes. The tool that makes this possible is the World Wide Web. Not the Web that Tim Berners-Lee hacked together (15 years ago, according to Wikipedia) as a way for scientists to share research. It's not even the overhyped dotcom Web of the late 1990s. The new Web is a very different thing. It's a tool for bringing together the small contributions of millions of people and making them matter. Silicon Valley consultants call it Web 2.0, as if it were a new version of some old software. But it's really a revolution.

And we are so ready for it. We're ready to balance our diet of predigested news with raw feeds from Baghdad and Boston and Beijing. You can learn more about how Americans live just by looking at the backgrounds of YouTube videos—those rumpled bedrooms and toy-strewn basement rec rooms—than you could from 1,000 hours of network television. And we didn't just watch, we also worked. Like crazy. We made Facebook profiles and Second Life avatars and reviewed books at Amazon and recorded podcasts. We blogged about our candidates losing and wrote songs about getting dumped. We camcordered bombing runs and built open-source software.

America loves its solitary geniuses—its Einsteins, its Edisons, its Jobses—but those lonely dreamers may have to learn to play with others. Car companies are running open design contests. Reuters is carrying blog postings alongside its regular news feed. Microsoft is working overtime to fend off user-created Linux. We're looking at an explosion of productivity and innovation, and it's just getting started, as millions of minds that would otherwise have drowned in obscurity get backhauled into the global intellectual economy.

Who are these people? Seriously, who actually sits down after a long day at work and says, I'm not going to watch *Lost* tonight. I'm going to turn on my computer and make a movie starring my pet iguana? I'm going to mash up 50 Cent's vocals with Queen's instrumentals? I'm going to blog about my state of mind or the state of the nation or the steak-frites at the new bistro down the street? Who has that time and that energy and that passion? The answer is, you do. And for seizing the reins of the global media, for founding and framing the new digital democracy, for working for nothing and beating the pros at their own game, TIME's Person of the Year for 2006 is you.

Sure, it's a mistake to romanticize all this any more than is strictly necessary. Web 2.0 harnesses the stupidity of crowds as well as its wisdom. Some of the comments on YouTube make you weep for the future of humanity just for the spelling alone, never mind the obscenity and the naked hatred. But that's what makes all this interesting. Web 2.0 is a massive social experiment, and like any experiment worth trying, it could fail. There's no road map for how an organism that's not a bacterium lives and works together on this planet in numbers in excess of 6 billion.

33. Time magazine thinks in 2006:

- (A) History is a record of great men.
- (B) History is longer the record of great men.
- (C) History will record Web. 2.0.
- (D) History will fasten Web. 2.0.

34. Web. 2.0 is

- (A) a new protocol
- (B) a new software
- (C) an old software
- (D) a new product

35. When it says, "an organism that's not a bacterium lives and works together on this planet in numbers in excess of 6 billion," it means:

- (A) Web. 2.0 websites
- (B) Computer
- (C) People
- (D) Computer virus

**Part 2: (30%)**

**Section 1—Fill in the following blanks with suitable words (with appropriate forms of the verb) from the box provided. (2 points for each question)**

accelerate	wither	fossil	pristine	bewildering
instantaneous	ecology	demystify	boost	acoustic
extinction	enormous	desolate	vanish	unfold

36. The author thought that \_\_\_\_\_ her novel with a clear explanation would make her book boring.

37. Daniel's winning goal \_\_\_\_\_ his self-confidence in soccer.

38. Bank transfers used to take a few business days, now they are almost \_\_\_\_\_.

39. Since the room lacked any sunlight, May's plant \_\_\_\_\_ and died.

40. Danny thought that the violent footage from the prison break was simply \_\_\_\_\_.

41. Exhibits of dinosaur \_\_\_\_\_ usually attract many fascinated children to museums.

42. When Mike come back from the bathroom, he noticed that the women he was talking to at the bar had \_\_\_\_\_.

43. The lake on the mountain was simply \_\_\_\_\_, having never been polluted by humans.

44.

**Section 2— Rearrange and numbered the following sentences in the order they should appear in the literature review of a research report. (2 points for each sentence)**

- A. \_\_\_ Young and Strovick (1970) surveyed the food habits of 595 college freshmen in Oregon and found that the men generally had better diets than the woman.
- B. \_\_\_ Litman et al. (1975) reported that green and yellow vegetables and liver were not liked by teenagers in Minnesota public schools. They also found teachers have almost no influence on their students' food habits.
- C. \_\_\_ Studies of the food habits of young school children have shown that the diets of grade school children are often deficient in ascorbic acid, calcium and iron (Lantz et al. 1958).
- D. \_\_\_ A review of the literature indicates that food habit studies have been conducted with students from a variety of different age group.
- E. \_\_\_ Young (1965) examined the nutrition habits of a group of young school and found that their mothers lacked information about the importance of milk and foods rich in ascorbic acid.
- F. \_\_\_ Studies done with adolescent children report similar findings (Ohlson, 1970, Underwood, 1972).
- G. \_\_\_ A number of studies have been conducted using both male and female college students as subjects.