

※ 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。

I. Cloze Test: 50%; 2% for each question [本大題於答案卡作答]

A. Nobody likes doing the dishes, but it turns out that doing this mundane task might ___ 1. ___ in an unexpected way. According to a new study published in *Journal of Pediatrics*, washing dishes by hand instead of using a dishwasher might prevent the development of allergies.

Researchers in Sweden surveyed the parents of 1,029 children ages 7 and 8. They discovered that children ___ 2. ___ families hand-washed the dishes instead of using a machine were less ___ 3. ___ to have allergies.

Earlier research has shown that dishes washed by machine are cleaner than those washed by hand. So why would kids who eat off of slightly dirtier plates be better off when it comes to preventing allergies? One explanation is ___ 4. ___ on a theory known as the "hygiene hypothesis," which says the reason kids develop allergies is because their surroundings are actually too clean.

Your immune system keeps you healthy by fighting ___ 5. ___ like bacteria and viruses. But when you have allergies, it overreacts, and therefore it tries to fight ordinary things, such as pollen or certain foods.

Being exposed to germs, especially early in life, is good ___ 6. ___ for the immune system, says the lead author of the study, Dr. Bill Hesselmar of Queen Silvia Hospital in Sweden. "You stimulate the immune system in various ways and it becomes ___ 7. ___."

This study shows that while using the dishwasher might be easier, the ___ 8. ___ method of cleaning up could be better for your health.

- | | | | |
|-------------------------|-----------------|--------------|-------------------|
| 1. (A) take off | (B) pay off | (C) increase | (D) decrease |
| 2. (A) whose | (B) who | (C) whom | (D) where |
| 3. (A) likely | (B) likes | (C) alike | (D) liking |
| 4. (A) based | (B) according | (C) because | (D) due to |
| 5. (A) chemicals | (B) gases | (C) germs | (D) pollutants |
| 6. (A) habit | (B) calculation | (C) training | (D) scheme |
| 7. (A) fatal | (B) poisonous | (C) tolerant | (D) fatigued |
| 8. (A) state-of-the-art | (B) magnificent | (C) costly | (D) old-fashioned |

B. The first 3D printer was created by Charles W. (Chuck) Hull in the mid-1980s. It used a technique called stereolithography, in which a UV laser is shined into a vat of ultraviolet-sensitive photopolymer, tracing the object to be created on its surface. The polymer solidifies wherever the beam touches it, and the beam "prints" the object layer by layer per the instructions in the CAD/CAM (computer-aided design/computer-aided manufacturing) file it's working from. Hull founded a ___ 9. ___ called 3D Systems, which made stereolithography machines. Stereolithography is an expensive commercial technique, with machines usually costing \$100,000 or more. Today, 3D Systems sells 3D printers that use a variety of technologies, and ___ 10. ___ from entry-level kits to advanced commercial systems.

3D printing gives designers the ability to quickly turn concepts into 3D models or prototypes (a.k.a., rapid prototyping), and allows for rapid design changes. It allows manufacturers to produce products on ___11. ___ rather than in large runs, improving inventory management and reducing warehouse space. People in remote locations can ___12. ___ objects that would otherwise be inaccessible to them. 3D printing can save money and material over subtractive manufacturing techniques in which material is cut, drilled, or shaved off, as very little raw material is wasted. And it ___13. ___ to change the nature of manufacturing, eventually letting consumers download files for printing 3D objects in their own homes.

Designers use 3D printers to quickly create product models and prototypes from CAD drawings, but they're increasingly being used to make final ___14. ___ as well. Among the items made with 3D printers are shoe designs, furniture, wax castings for making jewelry, tools, tripods, gift and novelty items, and toys. The automotive and aviation industries use 3D printers to make parts. Artists can create ___15. ___, and architects can fabricate models of their projects. Archaeologists can make a 3D scan of a fragile artifact and print out a(n) ___16. ___ of the object. Likewise, paleontologists could duplicate, say, a dinosaur skeleton for ___17. ___.

- | | | | |
|---------------------|----------------|----------------|------------------|
| 9. (A) mine | (B) company | (C) shuttle | (D) encyclopedia |
| 10. (A) arrange | (B) avenge | (C) range | (D) revenge |
| 11. (A) demand | (B) errands | (C) grants | (D) command |
| 12. (A) fabricating | (B) fabricate | (C) fabricated | (D) fabrication |
| 13. (A) polices | (B) pleases | (C) promises | (D) piles |
| 14. (A) products | (B) fetus | (C) basis | (D) poles |
| 15. (A) skeletons | (B) skills | (C) sculptures | (D) societies |
| 16. (A) copy | (B) map | (C) analysis | (D) test |
| 17. (A) treatment | (B) medication | (C) display | (D) replay |

C. The ground shook on April 25, 2015, in the South Asian country of Nepal when the region was hit by a ___18. ___ earthquake. The quake registered 7.8 on the Richter scale, a 10-point system developed to measure the magnitude, or force, of earthquakes. It was the ___19. ___ earthquake to strike Nepal since 1934.

While the epicenter of the earthquake was located 50 miles northwest of Nepal's capital city, Kathmandu, it was Kathmandu that suffered significant ___20. ___. In much of the countryside, it was worse. The earthquake caused buildings to collapse and triggered a(n) ___21. ___ on Mount Everest, the world's ___22. ___ mountain. It was strong enough to be felt all across parts of India, Bangladesh, Tibet, and Pakistan.

"There are people who are not getting food and shelter," said Udav Prashad Timalsina, a top official in Nepal. "I've had reports of villages where 70 percent of the houses have been ___23. ___."

Up to the evening of April 27, more than 4,000 people are known to have ___24. ___ their lives. About 7,180 people were ___25. ___ by the quake, as registered in the police record.

- | | | | |
|----------------------|------------------|-----------------|----------------|
| 18. (A) trivial | (B) mild | (C) massive | (D) loud |
| 19. (A) large | (B) largest | (C) small | (D) smallest |
| 20. (A) construction | (B) construct | (C) image | (D) damage |
| 21. (A) avalanche | (B) thunderstorm | (C) flood | (D) drought |
| 22. (A) worst | (B) tallest | (C) darkest | (D) gravest |
| 23. (A) destroying | (B) destroyed | (C) distrusting | (D) distrusted |
| 24. (A) gained | (B) gain | (C) lost | (D) lose |
| 25. (A) inspired | (B) invoked | (C) injured | (D) indentured |

II. Reading Comprehension: 30%; 3% for each question [本大題於答案卡作答]

A. While sweet treats can be hard to resist, the World Health Organization (WHO) has set new dietary guidelines for people around the world. The guidelines, released on March 1, 2015, advise that both adults and children cut back on their sugar intake to stay healthy.

In a statement, Francesco Branca, director of the WHO's nutrition department, said there is "solid evidence" that reducing daily sugar intake "reduces the risk of overweight, obesity, and tooth decay."

The guidelines do not apply to the sugars in fresh fruits and vegetables or those that are naturally present in milk. According to the WHO, there is no reported evidence of negative effects of consuming those sugars. Instead, the new guidelines focus on "added" or "free" sugars. These include sugars that are added to processed foods and drinks such as donuts, cookies, candy, and soft drinks.

Added sugars are sometimes described as "hidden" sugars because they exist in foods we might not think of as sweets, such as honey and ketchup. Health experts advise that consumers look at ingredients on food packages to help make better-informed decisions.

The WHO recommends that people in the United States, Europe, and other Western societies should cut their average sugar intake by about two-thirds, or down to just 10% of their overall calories. For developing countries, where dental care is less advanced and cavities are more difficult to prevent, the WHO recommends that sugar intake be reduced to 5%.

26. According to the passage above, which of the following statements is not true?

- (A) WHO recommends people to reduce their sugar intake.
 (B) WHO does not yet have sufficient evidence for the dietary suggestion they make, although they are confident in its validity.
 (C) WHO alerts the public of the danger of artificial sugars.
 (D) WHO urges Americans and Western Europeans to cut down their consumption of sugary products.

27. Which of the following health issues is not considered to be directly related to sugary intake?

- (A) Overweight (B) Obesity (C) Cavity (D) Glaucoma

28. Why is it harder to detect added sugars than plain sugars?

- (A) Added sugars do not taste sweet.

(B) They may exist in various processed foods or condiments.

(C) They are transparent in appearance.

(D) They are not marked on labels of food packages.

29. What is health experts' recommendation for people to better control their consumption of sugar?

(A) Take medicines that inhibit craving for sweet foods.

(B) Report to a nutritionist regularly.

(C) Check the list of ingredients before purchasing food.

(D) Entrust the responsibility to a specialist.

30. What does the final paragraph imply about people living in the economically advanced countries?

(A) They are highly knowledgeable about the hazards of having sweet foods.

(B) They spend more on sugared foods.

(C) They take too much sugar.

(D) They have very limited access to dental care.

B. Research on the possibility of cell phone addiction is an emerging field, and a lot of it centers on the habits of the youngest millennials (now teens and young adults), a generation that can't remember what it was like to not have a cell phone. A recent study published in the *Journal of Behavioral Addictions* found that female college students spend an average of 10 hours a day on their cell phones, while male students report spending nearly eight. The study also found that about 60 percent of study participants think they may be addicted to their cell phones.

James Roberts, a professor of marketing at Baylor University's Hankamer School of Business, surveyed 164 college undergrads about their relationships to their phones and explored which cell phone activities seemed to be most associated with cell phone "addiction." He found that they differed between male and female participants. For instance, for women, Pinterest, Instagram and number of phone calls were good predictors of a possible cell phone addiction, while listening to music was not. Meanwhile, for men, Facebook, Instagram and Twitter were stronger addiction predictors, as were phone calls, texts, emails and reading books on their phone.

Roberts hypothesized that the gender differences could mean that women use their phone to foster social relationships, while men are more interested in entertainment and usefulness. But because the participants weren't randomly sampled (they all came from a class at Baylor), it's unclear how generalizable the results are to a larger population of college-aged people. Still, scholars in the field see Roberts' findings as a pretty accurate reflection of how attached young people are to their phones.

"Cell-phones have become inextricably woven into our daily lives—an almost invisible driver of modern life," Roberts concluded in his study. "It is incumbent upon researchers to identify the all-important 'tipping point' where cell-phone use crosses the line from a helpful tool to one that enslaves both users and society alike."

31. What is the topic for the above passage?
(A) Cell phone radiation (B) Cell phone addiction (C) Cyberbullying (D) Identity theft
32. In the research conducted by James Roberts, the youngest millennials _____.
(A) resent the popularity of cell phone (B) are mostly aware of their dependence on cell phone
(C) do not spend much time on cell phone (D) are nostalgic for their cell phone-free childhood
33. What is Roberts' hypothesis about gender differences among young male and female cell phone users?
(A) Men rely on their phone to maintain their social image.
(B) Women use cell phone apps to manage their connection with others.
(C) Men are more easily addicted to online shopping.
(D) Women care only about apps for entertainment and information.
34. Who are the participants in Roberts' research?
(A) Belgian citizens (B) Baylor alumni (C) College students of a class (D) A choir
35. Which of the following statements about James Roberts is true?
(A) He advises people to quit using cell phones.
(B) He believes smart watch will soon replace smart phone.
(C) He concludes that women are less dependent on cell phone than men are.
(D) He thinks researchers should be able to tell the defining characteristics of cell phone addiction.

III. Composition: 20% [注意：本大題於答案卷作答]

Picking a college major can be overwhelming. Do you think students should follow their hearts in making the decision, or they should choose a major with better job prospects? Write a short essay of 100-120 words to express your thoughts on this issue. No need to insert a title. Budget your time wisely.