一、字彙：請根據每句文意，選出最恰當的答案。

1. Thanks to Hurricane Sandy, the New York City has drawn up a storm-protection plan, the proposal including strengthening the power grid and _____ barrier dunes on beaches.
   (A) plunging    (B) descending    (C) evacuating    (D) installing    (E) retrieving

2. While other robots require the user to steer manually, Robot Ava is characterized by its full _____, no manual operation needed.
   (A) autonomy    (B) capacity    (C) involvement    (D) paradox    (E) sovereignty

3. It is a high art for politicians to maintain friendly relations with their _____, even though they belong to opposing parties or have different interests.
   (A) umpires    (B) intruders    (C) adversaries    (D) predecessors    (E) subordinates

4. The painting shows an old woman sitting looking out on a stormy sea from a _____ cottage garden: the contrast is most appealing.
   (A) virtual    (B) tranquil    (C) monstrous    (D) fabulous    (E) disposable

5. Feeling exhausted, James knew he had _____ overworked himself for over 20 years, and he decided it was time for a break.
   (A) tremendously    (B) minimally    (C) immensely    (D) efficiently    (E) chronically

6. In the novels, Jane Austen usually wrote about only three to four families in a country village. Yet within the limits of this subject area she examined _____ human traits with great wit and insight.
   (A) indifferent    (B) universal    (C) luxurious    (D) initiative    (E) comprehensive

7. Nothing can compare with the _____ joy of knowing that your parents are very proud of you.
   (A) malicious    (B) concise    (C) exquisite    (D) dormant    (E) arbitrary

8. Steve suffers from a general _____ with pains and depression. I think he needs a good vacation now.
   (A) divergence    (B) remnants    (C) maneuver    (D) malaise    (E) criteria

9. The majority of people in Taiwan speak Mandarin Chinese, Taiwanese Hokkien, and Hakka, as their native language. The _____ speak Formosan languages, or ethnic languages of the aboriginal tribes in Taiwan.
   (A) remainder    (B) rotation    (C) proportion    (D) monopoly    (E) intervention

10. At the completion of her Ph.D. degree, Marilyn _____ her dissertation to her parents and husband, who had given all their support in the course of her doctoral study.
    (A) committed    (B) certified    (C) withstood    (D) assaulted    (E) dedicated

二、英文字彙類比：每一題有兩組英文字，請依他們的相互關係找出答案。
   例如：doctor : symptom = detective : (A. story  B. clue  C. crime  D. police  E. mystery)。答案是 B，
   因為醫師依據症狀判斷病因，而偵探依據線索追尋犯罪證據。

11. hobble : walk = stammer : _____
    (A) cry    (B) hear    (C) laugh    (D) run    (E) speak

12. unintentional: intent = clumsy: _____
    (A) grace    (B) norm    (C) proof    (D) rage    (E) talent

13. boats : fleet = bees : _____
    (A) flock    (B) gang    (C) pack    (D) school    (E) swarm

14. friendly : amicable = stubborn : _____
    (A) obstinate    (B) meditative    (C) innovative    (D) hysterical    (E) elaborate

15. extrinsic : inherent = anonymous : _____
    (A) denied    (B) masked    (C) praised    (D) signed    (E) unknown
三、綜合測驗：請依據篇章上下文意，選出最適當的答案。

Passage 1: Questions 26-30

A bank has just been robbed. The only evidence __(26)__ is a blurry face in the grainy security camera footage. The photo gets enhanced and run through a database. A few drama-filled moments later, the computer spits out the name and address of a suspect.

According to the Washington Post, police officers in 26 states in the U.S. are empowered to use facial recognition software __(27)__ a database of driver’s license photos to track down witnesses, verify IDs, and learn more about potential suspects. Over 120 million Americans appear in these facial recognition systems nationwide. It doesn’t __(28)__ if you’ve never been arrested for a crime before—if you drive, the police already know what you look like.

Not all states let the police search through photo databases of private citizens. Oregon, Washington, New York and eight other states __(29)__ police access to face-recognition systems. California, meanwhile, does not even have a facial-recognition system in place.

Currently, most police officers do not need a warrant to run your picture or likeness through a law enforcement database, so long as doing so has a(n) __(30)__ purpose. Police can analyze security camera footage stills and even Facebook photos to help crack difficult cases.

26. (A) referred to  (B) left behind  (C) passed through  (D) carried away  (E) matched up
27. (A) on behalf of (B) by means of (C) in conjunction with (D) for the sake of (E) to the point of
28. (A) matter  (B) ignore  (C) suffice  (D) apply  (E) qualify
29. (A) acquire  (B) expose  (C) maintain  (D) provide  (E) restrict
30. (A) definite  (B) legitimate  (C) moral  (D) presentable  (E) ultimate

Passage 2: Questions 31-35

Surrounding the geographic North Pole is a deep, ice-covered ocean called the Arctic Ocean. It is bordered by the northern parts of the continents of North America, Europe, and Asia. This is the Arctic region. Here, periods of daylight __(31)__ with continuous darkness for days to months at a time. Cold pervades the region. But unlike the southern polar region of Antarctica, which has no native human __(32)__ , people have lived in the Arctic for thousands of years. __(33)__ its location, its geography and climate, and its wealth of natural resources, the Arctic region is politically, scientifically, and economically important.

The boundaries of the Arctic region are __(34)__ in different ways. The Arctic is sometimes defined as the
area north of the Arctic Circle, an imaginary line around the globe at 66 degrees, 30 minutes north latitude. Other ways of determining the region’s limits include the tree line, the most northerly point (35) which trees will grow, and the extent of polar sea ice and of permafrost, or land that is permanently frozen.

31. (A) drift  (B) transform  (C) alternate  (D) refund  (E) highlight
32. (A) fragments  (B) prospects  (C) scales  (D) fundamentals  (E) inhabitants
33. (A) On top of  (B) Because of  (C) Together with  (D) Except for  (E) In spite of
34. (A) measured  (B) acknowledged  (C) reconciled  (D) prolonged  (E) constrained
35. (A) for  (B) on  (C) between  (D) at  (E) of

Passage 3: Questions 36-40
The risk we run of dying at any particular age is called the force of mortality for that age. The force of mortality has been carefully worked out for all ages of people—this is (36) life insurance rates are based on. Naturally, it grows steadily greater with age. If we kept all through life the same force of mortality that we had at 12—never becoming any more likely to die than we were then—we could all hope to live several hundred years, (37) we were very unlucky or careless. The fact that people do not live several hundred years is due to a process called aging.

We can recognize aging by the gray hair, weakened muscles, wrinkled skin, loss of hearing, and other (38) that it produces. It reduces our power of staying well and of getting better if we fall ill. A common cold may not be serious in a young person, but its (39) may lead to death in an old person.

The loss of the power to stay healthy happens at about the same (40) in everybody. As we age, we tend to be like an old automobile—more and more things go wrong with us.

36. (A) that  (B) what  (C) nothing  (D) such  (E) other
37. (A) unless  (B) if  (C) lest  (D) after  (E) although
38. (A) notes  (B) samples  (C) representative  (D) factors  (E) signs
39. (A) symptoms  (B) treatment  (C) complications  (D) diagnosis  (E) immunity
40. (A) place  (B) percentage  (C) amount  (D) rate  (E) scale

Passage 1: Questions 41-45
It was in the 1920s that the idea of freezing fresh vegetables into preserved, edible rectangles first caught hold, when inventor Clarence Birdseye developed a high-pressure, flash-freezing technique that operated at especially low temperatures. The key to his innovation was the flash part: comparatively slow freezing at slightly higher temperatures causes large ice crystals to form in food, damaging its fibrous and cellular structure and robbing it of taste and texture. Birdseye’s supercold, superfast method allowed only small crystals to form and preserved much more of the vitamins and freshness.

In the 90 years since, food manufacturers have added a few additional tricks to improve quality. Some fruits and vegetables are peeled or blanched before freezing, for example, which can cause a bit of oxidation—the phenomenon that makes a peeled apple or banana turn brown. But blanching also deactivates enzymes in fruit that would more dramatically degrade colors as well as flavor and nutrient content. What’s more, the blanching process can actually increase the fibrous content of food by concentrating it, which is very good for human digestion.

Canning is an older type of preservation; it’s also quite possibly the single most significant technological leap in food storage ever conceived. Developed in the early 19th century by an inventor working for the French navy, canning is a two-step process: first, heat foods to a temperature sufficient to kill all bacteria, and then seal them in airtight containers that prevent oxidation. Not all food comes out of the can as appetizing as it was before it went in. Some fruits and vegetables do not survive the 120℃ heating that is needed to sterilize food and can become soft and unappetizing. And in decades past, food manufacturers had way too free a hand with the salt shaker. That is not the case any longer for all brands of canned foods. A simple glance at the nutrition label which itself didn’t exist in the salty old days can confirm which brands are best.

As with frozen vegetables, fiber and nutrient content usually stay high in canned foods. Some research indicates that carotenoids, which can reduce cancer rates and eye problems, may be more available to the body.
following the routine heat treatment. What’s more, canned foods are bargain foods. Nutritionists recently have crunched the cost-per-serving numbers of some canned foods vs. their fresh counterparts, factoring in the time needed to prepare and the amount of waste generated. Again and again, canned foods came up the winner, with protein-rich canned pinto beans costing $1 less per serving than dried, for example, and canned spinach a full 85% cheaper than fresh.

41. What is the best title for this passage?
   (A) Food Labeling and Nutrition.
   (B) Frozen, Canned—and Good?
   (C) Costly Beauty in Food Industry
   (D) Conspiracy of Food Manufactures.
   (E) Canned Food Out and Frozen Food In.

42. Which of the following is most important feature of Birdseye’s method?
   (A) High pressure.      (B) Added vitamins.     (C) High temperature.
   (D) Fast freezing.    (E) Damaged fibrous structure.

43. According to the passage, which of the following is the major effect blanching would cause to vegetables?
   (A) Change of color.    (B) Added flavor.    (C) Enhanced nutrients.
   (D) Removal of water.   (E) Increased fibrous content.

44. What characterized the canned foods in the past in comparison with those today?

45. According to the passage, which of the following is true?
   (A) Canning appeared earlier than freezing in food industry.
   (B) Freezing of foods was invented by a Frenchman in the navy.
   (C) Sealing food in airtight containers is to kill possible bacteria.
   (D) Canned foods are more expensive than their fresh counterparts.
   (E) Birdseye’s method produces large crystals in foods than traditional slow freezing.

Passage 2: Questions 46-50

A few days ago at Khirbet El Tireh, I was pleasantly surprised to find under a green canopy the archeologist Salah Hussein Al-Houdalieh and his students from Al Quds University loading off buckets of stones, scraping dirt and dusting a mosaic floor. The site is believed to date back to the Roman Empire. It includes fortifications, stone dwellings, a Byzantine church, water cisterns and olive and grape presses. Khirbet El Tireh’s existence and its significance has long been known. Greek Orthodox faithful—the largest Christian community in Palestine—who believe the site to be the first burial place of the first Christian martyr, St. Stephen, hold open-air prayers here every August. Houdalieh told me that he hopes to find St. Stephen’s grave.

But he and his students may not manage to complete the work. He has been carrying out excavations throughout the West Bank every summer since 1992, and throughout that time has been hampered by inadequate funding. The Prince Claus Fund is contributing 30,000 euros for the Khirbet El Tireh project, which also includes preparing the site for tourism and educating the local community about the importance of archeology. But the dig isn’t being supported by the Palestinian Authority itself.

The Department of Antiquities and Cultural Heritage of Palestine focuses only on restoring sites that have already been unearthed. It has undertaken a very limited number of new excavations over the past two decades. When it has, the digs have usually been aimed at ensuring that there are no ruins of significance so that new construction can begin. Building licenses were issued despite evidence that archeological ruins were present. Most of Khirbet El Tireh in fact has been covered up in recent years with apartment blocks, two schools, a gas station and a wide road. And when historical sites in the West Bank aren’t being built over, they are often left unguarded and unmaintained — leaving them at risk of being damaged or looted.

Why this relative neglect? Lack of expertise, budget constraints and competing priorities all play a part. But I also suspect a surprising kind of complacency: Despite their longstanding struggle to win political rights from Israel, Palestinians may be taking for granted that the land around them, and its buried heritage, is theirs.

Certainly their attitude is different from that of the Israeli government. At the Canaanite ruins of Khirbet Rodana, a few miles east of Ramallah, excavations took place as long as Israel had full control over the area. But when the Palestinian Authority took over, they stopped, and a developer was later allowed to build a high-rise.
46. What is the main idea of this passage?
   (A) Archeology in Palestine is under-valued.
   (B) Historical sites are everywhere in Palestine.
   (C) Palestine and Israel are fighting for historical sites.
   (D) Building high-rises is a major priority for the Palestine Authority.
   (E) Antiquities and cultural heritage in Palestine are poorly-preserved.

47. Which of the following statements is true about Khirbet El Tireh?
   (A) The site is said to contain ruins from before Jesus was born.
   (B) It is believed that St. Stephen sacrificed his life to worship God here.
   (C) It is where Houdalieh and his students are digging archeological ruins.
   (D) The Israeli government has dug out a lot of ancient treasures from here.
   (E) The Prince Claus Fund contributes 30,000 euros every year for new excavations here.

48. Which of the following is a problem to Houdalieh and his team?
   (A) He doesn’t have enough funding.
   (B) Tourists are interrupting their digging work.
   (C) Their excavations are allowed only in a limited area.
   (D) He does not know how to fight the Palestinian Authority.
   (E) The government discourages people from studying archeology.

49. What does the Palestinian Authority do in the historical sites?
   (A) They help unearth new excavations in the sites.
   (B) They give out building licenses over historical sites.
   (C) They protect the historical sites with armed soldiers.
   (D) They hold ceremonies to show the importance of the sites.
   (E) They spend a big portion of the budget on the buried heritage.

50. What does the Israeli government do in the historical sites?
   (A) They hire more archeologists to collect historical treasures.
   (B) They build high-rises in the historical sites to build their own cities.
   (C) They undertake excavations as long as they occupy a historical site.
   (D) They keep fighting Palestine so that the Palestinians won’t ruin the sites.
   (E) They try to keep the historical treasures underground and unharmed forever.