

Q 6

英 語

この冊子は、英語の問題で 1 ページより 12 ページまであります。

〔注 意〕

- (1) 試験開始の指示があるまで、この冊子を開いてはいけません。
- (2) 監督者から受験番号等記入の指示があったら、解答用紙に受験番号と氏名を記入してください。また、解答用マークシートに受験番号と氏名を記入し、さらに受験番号をマークしてください。
- (3) 解答は、所定の解答用紙に記入したもの及び解答用マークシートにマークしたものだけが採点されます。
- (4) 解答用マークシートについて
 - ① 解答用マークシートは、絶対に折り曲げてはいけません。
 - ② マークには黒鉛筆(HBまたはB)を使用してください。
指定の黒鉛筆以外でマークした場合、採点できないことがあります。
 - ③ 誤ってマークした場合は、消しゴムで丁寧に消し、消しくずを完全に取り除いたうえ、新たにマークしてください。
 - ④ 解答欄のマークは、横 1 行について 1 箇所に限ります。
2 箇所以上マークすると採点されません。
あいまいなマークは無効となるので、はっきりマークしてください。
 - ⑤ 解答用マークシートに記載されている解答上の注意事項を、必ず読んでから解答してください。
- (5) 試験開始の指示があったら、初めに問題冊子のページ数を確認してください。
ページの落丁・乱丁、印刷不鮮明等に気づいた場合は、手を挙げて監督者に知らせてください。
- (6) 問題冊子は、試験終了後、持ち帰ってください。

1

Read the following passage and answer each question.

(61 points)

(This mark (*) indicates, see **Notes** after the text)

The starting point for our discussion is the common view expressed in the saying "Necessity is the mother of invention." That is, inventions supposedly arise when a society has an unfulfilled need: some technology is widely recognized to be unsatisfactory or limiting. Would-be* inventors, (1) by the prospect of money or fame, perceive the need and try to meet it. A certain inventor finally comes (1 solution 2 to 3 with 4 a
(2) 5 up 6 superior) the existing, unsatisfactory technology. Society adopts the solution if it is compatible with the society's values and other technologies.

(3) Quite a few inventions do conform to this commonsense view of necessity as invention's mother. In 1942, in the middle of World War II, the U. S. government set up the Manhattan Project with the clear goal of inventing the technology required to build an atomic bomb (4) Nazi Germany could do so. That project succeeded in three years, at a cost of \$2 billion (equivalent to over \$20 billion today). Other instances are Eli Whitney's 1794 invention of his cotton gin* to replace laborious hand cleaning of cotton grown in the U. S. South, and James Watt's 1769 invention of his steam engine to solve the problem of pumping water out of British coal mines.

These familiar examples deceive us into assuming
(5) that other major inventions were also responses to perceived needs. In fact, many or most inventions were developed by people driven by curiosity or by a love of experimenting, in the absence of any initial demand (6) the product they had in mind. Once a device had been invented, the inventor then had to find an application for it. Only after it had been in use for a considerable amount of
(7) time did consumers come to feel that they "needed" it. Still other devices, invented to serve one purpose, eventually found most of their use for other, unanticipated purposes. It may come as a surprise to learn that these

inventions in search of a use include most of the major technological breakthroughs of modern times, (8) from the airplane and automobile to the phonograph and transistor. Thus, invention is often the mother of necessity, rather than vice versa.

A good example is the history of Thomas Edison's phonograph, the most original invention of the greatest inventor of modern times. When Edison built his first phonograph in 1877, he published an article proposing ten uses to which his invention might be put. They included preserving the last words of dying people, recording books for blind people to hear, announcing clock time, and teaching spelling. Reproduction of music was not high on Edison's list of
(9) priorities. A few years later Edison told his assistant that his invention had no commercial value. (10) another few years he changed his mind and did enter business to sell phonographs — but for use as office dictating machines. When other entrepreneurs* created jukeboxes by arranging for a phonograph to play popular music at the drop of a coin, Edison objected to this unexpected use, which in his opinion lessened the serious office use for which it was intended. Only after about 20 years did Edison reluctantly
(11) concede that the main use of his phonograph was to record and play music.

The motor vehicle is another invention whose uses seem obvious today. However, it was not invented in response to any demand. When Nikolaus Otto built his first gas engine, in 1866, horses had been supplying people's land transportation needs for nearly 6,000 years, supplemented increasingly by steam-powered railroads for several decades. There was no crisis in the availability of horses, no dissatisfaction (12) railroads.

Because Otto's engine was too weak, heavy, and tall, it did not recommend itself over horses. Not until 1885 did engines (13) to his satisfaction that Gottfried Daimler successfully installed one on a bicycle to create the first motorcycle; he waited until 1896 to build the first truck.

In 1905, motor vehicles were still expensive, unreliable toys for the rich.

Public acceptance of horses and railroads (14 a) high until World War I, when the military concluded that it really did need trucks. Intensive postwar lobbying by truck manufacturers and armies finally (14 b) the public of its own needs and (14 c) trucks to begin to replace horse-drawn wagons in industrialized countries. Even in the largest American cities, the changeover (14 d) 50 years.

Inventors often have to persist at their experimenting for a long time in the absence of public demand, because early models perform too poorly to be useful. The first cameras, typewriters, and television sets were as awful as Otto's gas engine. That makes (1 an 2 difficult 3 for 4 inventor 5 it 6 to) ⁽¹⁵⁾ foresee whether his or her awful prototype might eventually find a use and thus warrant more time and expense to develop it. Each year, the United States issues about 70,000 patents, only a few of which ultimately reach the stage of commercial production. For each great invention that ultimately found a use, there are countless others that did not. Even ⁽¹⁶⁾ inventions that meet the need for which they were initially designed may later prove more valuable at meeting unforeseen needs. While James Watt designed his steam engine to pump water from mines, it soon was supplying power to cotton mills, then (with much greater profit) propelling locomotives and boats.

(Notes) would-be : aspiring

cotton gin : a machine for separating cotton from its seeds

entrepreneur : a person who makes money by starting or running businesses, especially when this involves taking financial risks

(1) Choose the most appropriate word for the blank (1) and mark the number on your **Answer Sheet A**.

1 mistaken

2 mixed

3 modified

4 motivated

(2) Arrange the words within the brackets (2) to make a correct sentence and mark each number in proper order on your **Answer Sheet A**.

(3) Choose the most appropriate answer which has the closest meaning to the underlined word (3) and mark the number on your **Answer Sheet A**.

1 A large number of

2 A small proportion of

3 Not so many

4 Too many

(4) Choose the most appropriate word for the blank (4) and mark the number on your **Answer Sheet A**.

1 before

2 how

3 what

4 which

(5) Choose the most appropriate word which has the closest meaning to the underlined word (5) and mark the number on your **Answer Sheet A**.

1 believing

2 cheating

3 persuading

4 rejecting

(6) Choose the most appropriate word for the blank (6) and mark the number on your **Answer Sheet A**.

1 at

2 by

3 for

4 through

(7) Choose the most appropriate answer which has the closest meaning to the underlined words (7) and mark the number on your **Answer Sheet A**.

- | | |
|-------------------|----------------------|
| 1 a far amount of | 2 a large amount of |
| 3 a lot amount of | 4 a pretty amount of |

(8) Choose the most appropriate word for the blank (8) and mark the number on your **Answer Sheet A**.

- | | |
|--------------|-------------|
| 1 arranging | 2 differing |
| 3 organizing | 4 ranging |

(9) Choose the most appropriate answer which has the closest meaning to the underlined sentence (9) and mark the number on your **Answer Sheet A**.

- 1 Edison didn't have any interest in reproducing the music list.
- 2 Edison never felt involved in reproducing music.
- 3 Edison's list of priorities did not include reproduction of music.
- 4 Edison was not very interested in reproducing music.

(10) Choose the most appropriate word for the blank (10) and mark the number on your **Answer Sheet A**.

- | | |
|----------|-----------|
| 1 Above | 2 Behind |
| 3 Within | 4 Without |

(11) Choose the most appropriate word which has the closest meaning to the underlined word (11) and mark the number on your **Answer Sheet A**.

- | | |
|-----------------|----------------|
| 1 carefully | 2 delightfully |
| 3 significantly | 4 unwillingly |

(12) Choose the most appropriate word for the blank (12) and mark the number on your **Answer Sheet A**.

- | | |
|---------|--------|
| 1 along | 2 from |
| 3 into | 4 with |

(13) Choose the most appropriate word for the blank (13) and mark the number on your **Answer Sheet A**.

- | | |
|----------|-----------|
| 1 belong | 2 improve |
| 3 reach | 4 react |

(14) Choose the most appropriate word for each blank (14 a), (14 b), (14 c) and (14 d), and mark the number on your **Answer Sheet A**; however, you must not use the same word more than once.

- | | |
|-------------|-----------|
| 1 convinced | 2 enabled |
| 3 remained | 4 took |

(15) Arrange the words within the brackets (15) to make a correct sentence and mark each number in proper order on your **Answer Sheet A**.

(16) Choose the most appropriate answer which has the closest meaning to the underlined sentence (16) and mark the number on your **Answer Sheet A**.

- 1 Every invention that attains success, then goes on to accomplish even greater achievement.
- 2 Most inventions initially fail to meet their original intention, but often go on to achieve success.
- 3 Some successful inventions may later attain even greater achievement beyond their original intention.
- 4 Some inventions meet people's practical needs by altering their original design.

(17) For each of the following sentences, on your **Answer Sheet A**, mark **T** (True) for the statements that agree with the text and mark **F** (False) for the statements that do not agree.

- 1 So long as the solution is in harmony with the existing values and technologies of society, it will be accepted.
- 2 The cotton gin invented by Eli Whitney took the place of labor intensive hand cleaning of cotton in the Southern U.S.A.
- 3 Nearly all inventions are specifically designed to satisfy an obvious demand.
- 4 It is unusual that unexpected usages for new inventions should occur.
- 5 Necessity is not always the mother of invention.
- 6 Throughout his life, Thomas Edison remained convinced that his invention of the phonograph would be commercially successful.
- 7 By 1866 railroads had replaced horses as the main method of transportation.
- 8 In 1896 Gottfried Daimler succeeded in installing an engine on a bicycle, creating the world's first motorcycle.
- 9 Of all the patents issued in the U.S.A. each year, only a few fail to reach the stage of commercial production.
- 10 The steam engine, which was originally invented to pump water from mines, was eventually used to power cotton mills, locomotives, and boats.

右のページは白紙です。

2

Choose the most appropriate word for each blank to complete the sentence and mark the number on your **Answer Sheet A**. (14 points)

(1) () David Cooper is manager, he will start some major downsizing projects.

1 As yet

2 In addition

3 Now that

4 So far

(2) An initial sign-up fee is required for each new savings account, () the client is new or returning.

1 either

2 regarding

3 whatever

4 whether

(3) Pincher Creek, () runs through Sunset Park, offers a safe and enjoyable setting for children of all ages.

1 what

2 where

3 which

4 who

(4) Faculty members in the science department are to receive () permission from Dr. Brown when they plan to take paid vacations.

1 ahead

2 before

3 front

4 prior

(5) Everyone working for British Petroleum will be assigned to a new post () the company completes the merger with Titan Energy.

1 once

2 still

3 through

4 yet

(6) All applicants for the new management training transfer program must
() a complete medical checkup at a designated hospital.

1 delete

2 engage

3 sell

4 undergo

(7) At the international conference, () sales representatives in
attendance agreed that a consumer-first policy proved effective in improving
sales.

1 almost

2 most

3 near

4 nearly

3

The following is a conversation between A and B. Choose the most appropriate word for each blank (a-e) from below, and mark the number on your **Answer Sheet A**; however, you must not use the same word more than once. (15 points)

A: Excuse me, can you tell me about the city tour of L.A.?

B: Certainly. The L.A. tour is 4 to 6 hours of sightseeing in L.A. and Hollywood. We can (a) you downtown L.A. and Beverly Hills. An hour lunch is included.

A: So I can pretty much (b) all those famous spots, right?

B: You got that right. We will go to Beverly Hills, Rodeo Drive, the Hollywood Sign, the Hard Rock Café, Grauman's Chinese Theater and....

A: Grauman's Chinese Theater is the one with the hand and foot print of celebrities?

B: Yes. We take you to the Walk of Fame where the stars are embedded in the sidewalk.

A: Wow! Does the tour also include movie star homes?

B: You (c). We also take you to the Hollywood Bowl, Sunset Blvd and Sunset Strip. And a very famous place called Olvera St., where Los Angeles started 200 years ago.

A: How do I make a reservation?

B: You can make one right now or you can (d) us later.

A: How much is it?

B: It will be \$120 including lunch. Our tour bus leaves at 8:00 in the morning, back here around 2:00 in the afternoon. We also offer hotel pickups from most locations.

A: OK. Thanks for the information. I will call you.

B: Please (e) so. Be sure to make reservations in advance.

1 bet

2 call

3 cover

4 do

5 show

4

In the box on your **Answer Sheet B**, write the word that applies to both of the blanks. You **MUST** spell the entire word. The first letter of the word has been provided within the brackets. (10 points)

- (1) "I have (r) out of coffee. Would you like tea instead?"

In the long (r), everything will be OK.

- (2) I am on good (t) with him.

Her speech was laced with a lot of technical (t).

- (3) He couldn't (f) out how to solve the problem.

She is very attractive. She has a nice (f).

- (4) It's your (t) to deal.

When you leave the room, be sure to (t) off the light.

- (5) I have little (i) in these subjects.

The bank charges me 15% (i) on the loan.

