

2023 年度(令和 5 年度)

## 前 期 日 程

# 英 語 (80 分)

### 注 意 事 項

1. 試験開始の合図があるまで、この問題冊子を開いてはいけません。
2. 問題冊子は、1 ページから 18 ページまであります。解答用紙は、2 枚からなっており、「1」はマーク式、「2」は記述式です。ページの脱落等に気付いたときは、手をあげて監督者に知らせなさい。
3. 監督者の指示に従って、すべての解答用紙の受験番号欄に受験番号を記入し、マーク欄にマークしなさい。
4. 解答はすべて、解答用紙の指定された欄にマーク又は記入しなさい。
5. 受験番号のマーク時及び解答用紙「1」の解答には、必ず黒鉛筆(H, F, HBに限る)及びプラスチック製の消しゴムを使用し、「マーク例」に従って、正しくマークしなさい。黒鉛筆以外のもの(シャープペンシル等)を使用してマークした場合、マークが薄い場合、一部分しかマークしていない場合、訂正箇所を消しゴムできれいに消していない(消し跡が残っている)場合は、マークが正しく読み取れず、採点できないことがあります。
6. 解答用紙の網掛け部分及び※を付した欄には、何も記入してはいけません。
7. 問題冊子の白紙と余白は下書きに適宜利用してもよいが、どのページも切り離してはいけません。
8. 試験終了後、この問題冊子は持ち帰りなさい。

# I

- 1 Read the following text and answer the question below.

この部分に記載されている文章については、  
著作権上公開することはできません。

【出典(一部改変) : <https://www.bbc.com/>】

Which of the following is the main idea of the text?

- A. Examining garbage should be more encouraged in business.
- B. Examination of garbage is not allowed in business in the U.S.
- C. Examining garbage can reveal a lot of information.
- D. Examination of garbage is the most proper research method for corporations.

2 Read the following text and answer the question below.

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【出典(一部改変) : <https://japannews.yomiuri.co.jp/>】

Which of the following statements is true?

- A. Burning plastic garbage causes ocean pollution in Southeast Asia.
- B. The Japanese government will provide financial aid to build a large garbage burning plant in Vietnam.
- C. The plant is expected to burn 500 tons of garbage and generate 92,000 megawatt-hours every day.
- D. The Vietnamese government expects the plant to reduce air pollution in the north of the country.

3 Read the following text and answer the question below.

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【出典(一部改変) : <https://www.bbc.com/>】

Which of the following best fills [ X ]?

- A. So is the relationship between the brain size and technological development
- B. Actually, the size of an animal brain has not changed
- C. There must be other factors, too
- D. It depends on whether animals have bigger brains or not, too

4 Choose the best answer from A—D to rearrange the following sentences in the best order.

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【出典(一部改変) : <https://www.sawandsine.co.uk/>】

- A. ①—②—③—⑤—④
- B. ①—④—③—②—⑤
- C. ⑤—③—①—②—④
- D. ⑤—④—③—①—②



## II

Read the following text and choose the most appropriate word or phrase from A—D to fill in ( 1 )—( 10 ).

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【出典(一部改変) : <https://www.sciencedaily.com/>】

- (1) A. at                    B. during                    C. to                    D. while
- (2) A. fired                    B. hired                    C. required                    D. tried
- (3) A. involved                    B. concerned                    C. connected                    D. regarded
- (4) A. what                    B. where                    C. why                    D. about
- (5) A. because of                    B. due to                    C. given                    D. rather than
- (6) A. associated                    B. begin                    C. compared                    D. keep
- (7) A. as                    B. in                    C. to                    D. with
- (8) A. disappear                    B. live                    C. take                    D. wait
- (9) A. obeyed                    B. developed                    C. eliminated                    D. satisfied
- (10) A. all the person                    B. any people  
      C. every person                    D. some people

この部分に記載されている文章については、  
著作権上公開することはできません。

【出典(一部改変) : <https://www.nytimes.com/>】

1 Choose the word from A—D which is closest in meaning to ①—⑤.

① A. friendly      B. stimulating      C. substantial      D. uninteresting

② A. innovation      B. history      C. engineering      D. technology

③ A. respect      B. humor      C. cash      D. attention

④ A. clubbed      B. named      C. laughed      D. played

⑤ A. control      B. defend      C. wake      D. offend

**2 Choose the best answer for each question.**

- (1) Where does Song Phanekham work?
- A. Paris
  - B. New York
  - C. Vancouver
  - D. Tokyo
- (2) Which is NOT mentioned as a consideration when designing a subway chime?
- A. noticeability
  - B. length
  - C. copyright
  - D. rider experience
- (3) Which city uses an instrument popular in 1980s pop music to create its chime?
- A. San Diego
  - B. Vancouver
  - C. Tokyo
  - D. New York
- (4) What effect of the chimes does Max Diamond stress the importance of?
- A. creating a relaxing riding experience
  - B. reducing riders' stress
  - C. moving people efficiently on and off trains
  - D. introducing original music to listeners
- (5) Which statement is NOT true?
- A. Ted Green's favorite subway chime is the one used in New Jersey.
  - B. The music used to signal departures in each Tokyo station is different.
  - C. Paris imitates a mechanical chime electronically.
  - D. The chime in New York city is shorter than usual.

## IV

Answer the questions below.

1 Emmy works at a stationery counter at Gokiso Department Store and she sells beautiful pens. There are blue, red, and black pens in stock. Blue pens are very popular while red ones are not so popular.

One day, the manager came to the counter and asked the clerks to sell all the stock by the end of the day. The manager handed some boxes of pens to each clerk. Emmy got 100 pens. The number of red pens and black pens was the same. The manager said Emmy could give a discount if necessary.

The store opened at 9:00 a.m., and by noon, Emmy had sold at the regular price of 120 yen all the blue pens she had planned to sell. However, the red pens and black pens had not been sold at all. Therefore, she decided to sell black pens at 100 yen each and red pens at 70 yen each.

By the end of the day, Emmy had sold all the pens in the boxes the manager gave to her and the total of the sales was 10,950 yen. Emmy was happy to tell the manager that she could sell all 100 pens.

How many pens of each color did Emmy sell? You do not need to consider tax.

Blue \_\_\_\_\_

Red \_\_\_\_\_

Black \_\_\_\_\_

2 Four friends are reading a magazine article. According to the article, your lucky number is 25 percent of the sum of your height in centimeters and the last two digits of the year of your birth. For example, if you were born in 1996, the year of your birth is counted as “96.” But people who were born in the year 2000 are very special; their birth year is counted as “100” instead of as “00.”

Peter is 164 centimeters and is 14 centimeters taller than Jane but six centimeters shorter than Mary. Tom is 20 centimeters taller than Peter. Tom is very young; he was born in the year 2000. Mary is much older; she was born thirty years before Tom. And the other woman can remember the words to some of the old Buddy Holly songs. This is because she came into this world exactly one half century before Tom did. Peter was born a full decade after the oldest person.

What is Mary’s lucky number?

3 Nancy bought some candy bars for her students at a department store. There were four flavors of candy bar at the store: chocolate, pineapple, banana, and strawberry. Chocolate candy bars were the cheapest and pineapple the most expensive, six times as much as the cheapest one. As gift-wrapping service was not available for chocolate candy bars, Nancy decided to choose the second cheapest candy bars for her students, which cost one-third the price of the most expensive ones.

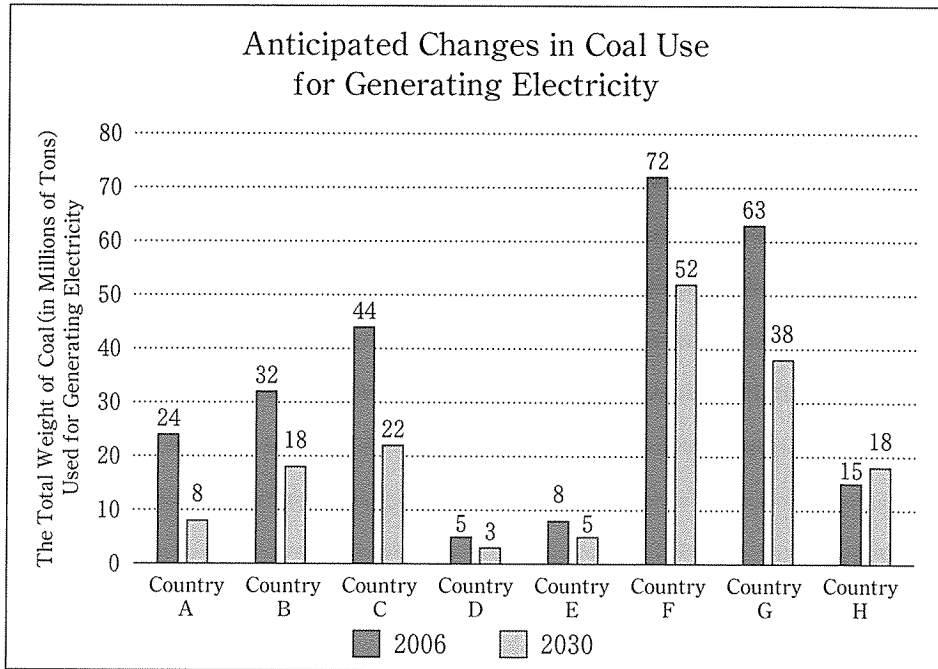
She bought 24 strawberry candy bars so that she could give one gift-wrapped candy bar to each student. She also took a more expensive type of candy bar for her colleague, Hikaru. The price was double the price of the strawberry candy bar, but the elegantly wrapped candy bar was much bigger than the one for her students.

After adding one chocolate candy bar for herself and one pineapple candy bar for her sister, the total price for all the candy bars she bought at the shop was 11,800 yen.

How much does one candy bar of each flavor cost? You do not need to consider tax.

Chocolate	_____	yen
Pineapple	_____	yen
Banana	_____	yen
Strawberry	_____	yen

- 4 Choose the best statement from A—F to describe the graph made by an economist in 2010.



- A. Country B will be more successful than Country A in cutting down on coal use.
- B. Country D will probably use far more coal than any other country in 2030.
- C. Each country is expected to reduce the amount of coal used to produce electricity by 2030.
- D. Country H in 2006 used the highest amount of coal to produce electricity of any country and this trend will continue.
- E. Country A is expected to show the greatest percentage decrease in the amount of coal used to produce electricity of any country.
- F. The amount of coal used by Country C to produce electricity in 2006 was more than the amount used by Country B, but by 2030, this situation will be reversed.



## V

以下の問いに答えなさい。

あなたは、ロボット開発を行っている会社のエンジニアです。社長から、高齢者を支援するロボットの開発を任されました。あなたは、どのようなロボットを開発しようと思いますか。理由と共にあなたのアイデアを 60 語から 80 語の英語で述べなさい。