

英 語

(1 ～ 10 ページ)

注 意

1. 試験開始の合図があるまで、問題用紙を開いてはいけません。
2. 解答用紙に受験番号・氏名を記入してください。
受験番号は、下記の「受験番号欄記入例」に従って正確にマークしてください。
3. 解答用紙にはマーク式解答欄の番号が **1** ～ **75** までありますが、使用しない解答欄も含まれています。
4. 試験時間は **60 分** です。
5. 試験開始後、問題用紙に不備（ページのふぞろい・印刷不鮮明など）があったら申し出てください。
6. 中途退出は認めません。試験終了後、問題用紙は持ち帰ってください。

解答用紙の受験番号欄記入例

受 験 番 号 欄				
1	2	5	9	6
0	0	0	0	0
●	1	1	1	1
2	●	2	2	2
3	3	3	3	3
4	4	4	4	4
5	5	●	5	5
6	6	6	6	●
7	7	7	7	7
8	8	8	8	8
9	9	9	●	9

数字の位置に注意してマークしてください

マーク式解答欄記入上の注意

1. 解答は、HBの黒鉛筆を使用して丁寧にマークしてください。
《マーク例》
良い例 ●
悪い例 ○ ○ ○ ○
2. 訂正する場合は、プラスチック消しゴムで、きれいにマークを消し取ってください。
3. 所定の記入欄以外には、何も記入してはいけません。
4. 解答用紙を汚したり、折り曲げたりしてはいけません。

I 次の[1]～[8]の段落からなる英文を読み、1～8の各問について本文の内容として最も適切なものをそれぞれ①～④の中から一つずつ選びなさい。なお、*のついた語(句)には[注]があります。

[1] To date, analog methods of cooking such as using grills, cooktops, stoves, and microwaves have remained the world's predominant cooking methods. With the continual evolution of digital technologies, however, laser cooking and 3D food printing may present nutritious, convenient, and cost-effective cooking opportunities. Food printing is an application of additive manufacturing (AM)* that constructs 3D shapes from edible food inks. Using software to combine and cook ingredients allows a chef to more easily control the nutrient content of a meal, which could lead to healthier and more customized meals.

[2] Foods that are printed would be categorized as “processed,” given that in the process of preparation a food must be altered into a paste in order to make the cooking method work. Due to a growing shift of consumer preferences away from processed foods and towards whole foods, 3D food printing may seem against today's food trends. A recent preference for locally-grown whole foods suggests that the nation's diet is returning to what it was at the beginning of the 20th century. That was based on affordable real foods, rather than manufactured food products. There is also a distinct consumer preference for “naturalness” in food products.

[3] Processed foods have consistently received criticism from health authorities such as the Academy of Nutrition and Dietetics* and the World Health Organization. Processed foods arose from urbanization, industrialization, and the marketing of processed convenience foods to post-World War II consumers. However, this has led to an obesity crisis costing the U.S. \$50 billion per year in worsening worker productivity and increasing healthcare expenses. Obesity is the primary underlying factor for heart disease, type 2 diabetes, several types of cancer, and other chronic conditions.

[4] Food “processing,” however, includes a wider range of activities than most consumers realize. Steps as routine as chopping, blending, or pureeing* foods are considered processing methods. The main purposes of food processing include improving taste and texture, killing harmful micro-organisms, and extending shelf life*. Generally, processing foods can affect their nutrient content. Although the vitamins most vulnerable to loss during processing include some of the most important for human health, some foods' nutrient content is actually improved by processing. As the technology evolves, printing food will continue to improve to avoid nutrient degradation.

[5] We also see other important uses for 3D food printing, including creating alternatives to bland, unattractive pureed foods for those with swallowing and other digestive disorders. Bringing new textures and shapes to food can enhance its attractiveness while allowing for production on a large scale in a factory or food service kitchen setting in hospitals and other operations. The precision of ingredient types and amounts that 3D printed food offers may also be useful for those who must consume very precise quantities of nutrients, such as those with particular medical conditions. In addition, printed food may serve an important role as a sanitary source of food during pandemics such as COVID-19.

[6] Printing food can be environmentally sustainable. Ingredients could be sourced and processed for consumption locally, assisting local farmers and food suppliers. Supporters also point to this technology's ability to help produce products such as plant-based meats, seaweed-based products, and lower-cost unconventional proteins for consumers. Printed food also offers opportunities for manufacturers to extend shelf life, since the heat, light, and oxygen involved in the process can be precisely controlled. Lastly, food waste could be reduced since users would be printing just the ingredients they want to consume.

[7] Supporters of digital cooking claim that the food industry is constantly seeking innovation—food of different sizes, shapes, and textures. Digital cooking in the form of food AM could fill this gap in the market, but it still requires further development to become efficient and intuitive for consumer use. Supporters also claim that the shareability and the inclusiveness of the technology should be the vision for the food of tomorrow.

[8] Furthermore, those who promote AM in food production suppose that 3D printing may not further distance individuals from their food's origins, but rather allow consumers to choose foods grown closer to home and customize them for their personal tastes, energy, and nutritional needs. They propose that the technology takes much of the mental and physical labor out of cooking and lends itself to the enjoyment of at-home cooking. Research supports the notion that more frequent home cooking has been shown to lead to better health. Printing also has the unique characteristic of uniting science, cooking, leisure, and art. The expected market size of this industry (\$425 billion by 2025) is a testament to the fact that interest in 3D food printing is growing.

出典 : “The Future of Software-Controlled Cooking”

< <https://www.nature.com/articles/s41538-023-00182-6> > (一部改変)

[注] *additive manufacturing (AM) 「付加製造法 (材料を積層・結合させる加工方法)」

*dietetics 「食事療法学」 *puree 「～をピューレ状にする」 *shelf life 「保存可能期間」

1 Which of the following is correct according to the first paragraph?

- ① Stoves are no longer the world's primary method of cooking.
- ② Laser cooking has been getting more popular than digital technologies.
- ③ Food printing uses edible inks to create 3D shapes.
- ④ Food printing software keeps a chef from being in good shape.

2 Which of the following is correct according to the second paragraph?

- ① Printed foods are considered processed foods because of their naturalness.
- ② People these days tend to favor unprocessed foods.
- ③ Today's food trends are totally different from those at the beginning of the 20th century.
- ④ Consumers increasingly prefer manufactured foods to whole foods.

3 Which of the following is correct according to the third paragraph?

- ① Health authorities such as the World Health Organization have been promoting processed foods.
- ② Food processing is the main cause of urbanization and industrialization.
- ③ Processed foods have been the focus of attention since before World War II.
- ④ Obesity caused by processed foods burdens the U.S. economically.

4 Which of the following is correct according to the fourth paragraph?

- ① Routine practices such as cutting and mixing foods are considered food processing.
- ② The primary purpose of food processing is to extend shelf life, not to improve taste.
- ③ Processing foods results in the loss of all nutrients essential to human health.
- ④ Improvements in 3D food printing technology will boost the decrease of nutrients.

5 Which of the following statements is NOT correct about 3D food printing according to the fifth paragraph?

- ① It makes tasteless food for patients with swallowing and other digestive disorders.
- ② It is suitable for production on a large scale in hospital food service kitchens.
- ③ It is likely to help those who need to control their intake of nutrients.
- ④ It can play a role in providing sanitary food in pandemics.

6 Which of the following is correct according to the sixth paragraph?

- ① More products from local farmers will be exported overseas.
- ② Promoters of 3D food technology produce environmentally friendly but costly ingredients.
- ③ Precisely controlled food printing minimizes shelf life.
- ④ Food waste will be reduced by printing only the food people need.

7 Which of the following is correct according to the seventh paragraph?

- ① Differences in size, shape, and texture demanded by the food industry are disappearing.
- ② Food AM will increase the gap between supporters and the food industry.
- ③ Further improvements in digital cooking are needed to increase usability.
- ④ Digital cooking has been criticized for its shareability and inclusiveness.

8 Which of the following is correct according to the eighth paragraph?

- ① Food printers could deprive people of the pleasures of cooking.
- ② 3D printing is expected to personalize the range of food choices for consumers.
- ③ Printing technology has hardly anything to do with science, cooking, leisure, or art.
- ④ The natural food industry will be worth \$425 billion by 2025.

Ⅱ 次の英文を読み、空所 [9] ～ [13] を埋めるのに文脈上最も適切なものをそれぞれ①～④の中から一つずつ選びなさい。なお、*のついた語には [注] があります。

Do you play an instrument? Have you ever made one? Terje Isungset can answer “yes” to both questions. He is a drummer, and he also makes instruments out of something pretty cool. That is ice!

He does not use just any frozen stuff. “You can buy perfect ice from factories around the world, but it will not have any sound,” Isungset told *TIME for Kids*. He gets his ice from the wild. “It’s nature that decides the sound of the instrument,” he says. “There will be variations from year to year.”

Isungset got the idea for ice music more than 20 years ago. “I was asked to do a concert in a ([9]) waterfall,” he says. That gave him the idea that the instruments should be made of ice.

As far as he could tell, this had not been done before. “There were no people to ask how to do this, there were no books to read about it, nothing on the Internet,” he says. “So, I had to create everything by myself, and I had to make ([10]) by myself. It was a lot of trial and error, and a lot of hard work.”

Finally, in 2006, Isungset helped start the Ice Music Festival Norway, in Europe. The 18th of these festivals is scheduled to take place from February 1st to 4th. Almost everything at the Ice Music Festival is frozen. “As you can imagine, there are a lot of ([11]) involved in doing an ice concert. We come to a place, we harvest the ice, and we build the venue out of snow and ice,” Isungset says.

Instruments include ice chimes, drums, and horns. If it were cold outside, wouldn’t your lips stick to an ice horn? “Many people ask that question,” Isungset says. “If the horn were made out of metal, they would get stuck completely. With an ice horn, I might get frostbite* on my lips.” His solution is to place a small piece of leather on the horn’s mouthpiece. “It’s the only part of the instrument that is not made of ([12]),” he says.

Some of Isungset’s instruments are based on familiar ones. Others he dreams up. “For the festival, I have a goal of trying to invent a new instrument every year,” Isungset says. “I like fantasy instruments, ones that don’t exist, but are based on the rules we have for making real instruments.”

When the show is over, Isungset says, “We invite the audience to give the ice instruments back to ([13]).”

出典 : ”Musical Nature” From *TIME for Kids*. ©2023 *TIME USA LLC*. All rights reserved. Used under license

< <https://www.timeforkids.com/g56/musical-nature-g5-8-plus/?rl=en-780> > (一部改変)

[注] *frostbite 「凍傷」

9

- ① running ② spreading ③ frozen ④ polluted

10

- ① many statues ② much noise ③ little effort ④ all the mistakes

11

- ① procedures ② fates ③ farms ④ cooks

12

- ① wood ② ice ③ metal ④ leather

13

- ① vendors ② downtown ③ firms ④ nature

Ⅲ 次の英文 14 ～ 19 の空所を埋めるのに文脈上最も適切なものをそれぞれ①～④の中から一つずつ選びなさい。

14

() made you do that? Can you tell me the reason?

- ① Why ② How ③ What ④ Where

15

Much () her surprise, Becky found that Takeshi actually does not like sushi.

- ① to ② in ③ by ④ from

16

Due to the massive hurricane, there were scarcely () buildings left in our town.

- ① some ② a little ③ no ④ any

17

It was an easy test and he (), but he didn't.

- ① ought to be passed ② should be passed ③ ought not to pass ④ should have passed

18

Tim and Jessy () an expensive piano the other day.

- ① purchase ② purchased ③ are purchasing ④ will be purchasing

19

Since my sister always buys lots of useless things, I have to throw ().

- ① it away ② them away ③ away herself ④ away themselves

IV 次の英文 20 ～ 25 の下線部と文脈上最も近い意味の語（句）をそれぞれ①～④の中から一つずつ選びなさい。

20

The experiment helped him come up with the theory of language and mind.

- ① think up ② stand against ③ go over ④ disagree with

21

Will your promise hold good even if you do not get the money?

- ① put aside ② keep your temper ③ be valid ④ be well off

22

Escoffier is a legendary French chef and, as it were, the father of modern cooking.

- ① so to speak ② as it happens ③ needless to say ④ in all likelihood

23

Good financial accounts are vital to the success of any enterprise.

- ① contrary ② peculiar ③ equivalent ④ indispensable

24

The professor said that their proposal is, in brief, the most sophisticated solution.

- ① in detail ② in short ③ in principle ④ in vain

25

Both options require thoughtful consideration of the costs.

- ① waste ② dismissal ③ deliberation ④ investment

V 次の対話文を完成させるよう、空所 ～ を埋めるのに文脈上最も適切なものをそれぞれ①～④の中から一つずつ選びなさい。

Harry: James, what are you doing on Friday night?

James: Nothing much. Why? () in mind?

Harry: I'm having a few friends over to my place for dinner. I wondered if you'd like to join us.

James: I'm not sure. I don't feel very comfortable with people I don't know. Do you think ()?

Harry: Don't worry about it. There will be me, you and four others. And you know Sally and Sarah, don't you?

James: Oh, will Sally and Sarah be there? (), I'd be delighted to come. I know them well. They're great fun.

Harry: Wonderful. By the way, are there any foods you can't eat? Do you have any allergies, or are you a vegetarian or a vegan?

James: No, I eat everything. What are you planning to cook?

Harry: Well, recently, I've been watching a great cooking show on TV. Last week, they prepared a wonderful fish dish on the program. I thought () and cook that for us all.

James: That sounds fantastic. Should I bring anything?

Harry: That's very kind of you, but you don't need to worry about that. Perhaps, bring something for us all to drink.

James: ()? If they do, I know an extremely tasty dry white wine that would go very nicely with the fish.

Harry: I'm sure everyone would enjoy that. So, see you Friday night at eight at my place.

26

- ① Do you have something
- ② How do you have everything
- ③ When did you keep the thing
- ④ Where did you go

27

- ① I will fit in
- ② nobody will show up
- ③ I won't come
- ④ you won't be there

28

- ① In no case
- ② In one case
- ③ If so
- ④ If not

29

- ① everyone should quit
- ② no one wants to show
- ③ we shouldn't watch
- ④ I'd like to try

30

- ① Do you like wine
- ② Does everyone like wine
- ③ Is there any wine
- ④ Is it alright to buy wine

VI 次の 31 ～ 36 の英文を完成させるよう、()内の①～⑤を文脈上最も適切な順に並べ替え、その5つの中で3番目にくる語の番号を選びなさい。

31

I allowed myself (① into ② be ③ entering ④ persuaded ⑤ to) the competition.

32

I will cover a few topics (① I ② be ③ think ④ which ⑤ may) of interest.

33

Please let (① weather ② whether ③ know ④ the ⑤ us) tomorrow will be fine or not.

34

Being extremely busy, Amy is difficult for (① make ② to ③ with ④ anyone ⑤ contact) .

35

Please (① as ② the ③ honestly ④ questions ⑤ answer) as possible.

36

That white (① me ② beautiful ③ surprised ④ moose ⑤ are) .

英語の問題はここまでです。

