

## D 英語問題

### 注意

1. 試験開始の指示があるまでこの問題冊子を開いてはいけません。
2. 解答用紙はすべて**HBの黒鉛筆**または**HBの黒のシャープペンシル**で記入することになっています。HBの黒鉛筆・消しゴムを忘れた人は監督に申し出てください。(万年筆・ボールペン・サインペンなどを使用してはいけません。)
3. この問題冊子は**16ページ**までとなっています。試験開始後、ただちにページ数を確認してください。なお、問題番号はI～Vとなっています。
4. 解答用紙にはすでに受験番号が記入されていますので、出席票の受験番号が、あなたの受験票の番号であるかどうかを確認し、出席票の氏名欄に**氏名のみ**を記入してください。なお、出席票は切り離さないでください。
5. 解答は解答用紙の指定された解答欄に記入し、その他の部分には何も書いてはいけません。
6. 解答用紙を折り曲げたり、破ったり、傷つけたりしないように注意してください。
7. この問題冊子は持ち帰ってください。

#### マーク・センス法についての注意

マーク・センス法とは、鉛筆でマークした部分を機械が直接よみとって採点する方法です。

1. マークは、下記の記入例のようにHBの黒鉛筆で枠の中をぬり残さず濃くぬりつぶしてください。
2. 1つのマーク欄には1つしかマークしてはいけません。
3. 訂正する場合は消しゴムでよく消し、消しきずはきれいに取り除いてください。

マーク記入例：

<b>A</b>	1	2	3	4	5
○	○	●	○	○	○

(3と解答する場合)

I . 次の文を読み、下記の1～10それぞれに続くものとして、本文の内容ともっともよく合致するものを、各イ～ニから1つずつ選び、その記号を解答用紙の所定欄にマークせよ。

Chicken liver is what the restaurateur Danny Meyer calls a “torpedo.” By itself, it may be boring, but when paired with what he calls an “enhancer”—applewood-smoked bacon in the case of the chicken liver on the menu at Tabla, Meyer’s Indian restaurant in New York City—it not only excites the taste buds but goes to work on the mind.

And the name of the Tabla appetizer, Boodie’s Chicken Liver Masala, draws even deeper from the growing field of menu psychology because Boodie is the mother of Floyd Cardoz, Tabla’s executive chef. People like the names of mothers, grandmothers and other relatives on their menus, and research shows they are much more likely to buy, say, Grandma’s zucchini cookies, burgers freshly ground at Uncle Sol’s butcher shop this morning and Aunt Phyllis’s famous salad.

Meyer and his team spent months pondering such matters before unveiling a new menu for their restaurant earlier this month. The price of Boodie’s chicken livers, for example, is \$9, written simply as 9. This is a friendly and manageable number at a time when numbers really need to be friendly and manageable. Besides, it has no dollar sign. In the world of menu engineering and pricing, a dollar sign is pretty much the worst thing you can put on a menu, particularly at a high-end restaurant. Not only will it scream “Hello, you are about to spend money!” into a diner’s tender psyche, but it can feel aggressive and look tacky.

Tabla is just one of the many restaurants around the country that are feverishly revising their menus. Hit by the recession, they are hoping that some magic combination of prices, adjectives, fonts, type sizes, ink colors and placement on the page can persuade diners into spending a little more money. “There is constant experimenting going on right now with menus and menu pricing,” said Sheryl E. Kimes, a professor of hospitality management at the Cornell School of Hotel Administration. “A lot of creative things are going on because the restaurants are trying to hold on for dear life to make sure they get through this.”

Some restaurants use what researchers call decoys. For example, they may place a really expensive item at the top of the menu, so that other dishes look more

reasonably priced; research shows that diners tend to order neither the most nor least expensive items, drifting toward the middle. Or restaurants might play up a profitable dish by using more appetizing adjectives and placing it next to a less profitable dish with less description so the contrast attracts the diner to order the profitable dish.

Menu design draws some of its inspiration from newspaper layout, which puts the most important articles at the top right of the front page, where the eyes tend to be drawn. Some restaurants will place their most profitable items, or their specials, in that spot. Or they place a dotted outline or a box around the item, put more white space around it to make the dish stand out, or add a photograph of the item or an icon like a chili pepper.

Unless a restaurant wants to frighten its customers, the price should always be at the very end of a menu description and should not be in any way highlighted. Kimes and other researchers at Cornell found that when the prices were given with dollar signs, customers spent less than when no dollar signs appeared. This study also found that customers spent significantly more when the price was listed in numerals without dollar signs, as in “14.00” or “14,” than when it included the word “dollar,” as in “Fourteen dollars.” Apparently even the word “dollar” can trigger what is known as “the pain of paying.”

Greg Rapp, a menu consultant, adds that if a restaurant wants to use prices that include cents, like \$9.99 or \$9.95 (without the dollar sign, of course), he strongly recommends .95, which he said “is a friendlier price,” whereas .99 is “less effective.” On the other hand, 10, or “10 dollars,” has attitude, which is what restaurants using those price formats are selling.

Research by Brian Wansink, director of the Food and Brand Lab at Cornell University, found that descriptive menu labels increased sales by as much as 27 percent. He has divided descriptions into four categories: geographic labels like “Southwestern Tex-Mex salad,” nostalgia labels like “ye old potato bread,” sensory labels like “buttery plump pasta,” and brand names like “Minute Maid orange juice.” Wansink said that vivid adjectives can not only influence a customer’s choice but can also leave them more satisfied at the end of the meal than if they had eaten the same item without the descriptive labeling.

Color is another important feature of menus. Tabla experimented with several different colors before settling on the final version of their menu. At one point, the cost of the liver and other prices were shaded navy blue, and some menu headings were orange. While the final version is in black and white, Meyer said he was thinking about adding orange and red. He remembers, from a hospitality management class he took years ago, what he learned about the truth on color: red and blue stimulate appetite, while gray and purple stimulate satiation. You will not find a shade of gray or purple on any of the menus at his 11 restaurants, he said.

Cardoz, who is also a partner at Tabla, said he considered the menu to be an important tool for communicating with his customers. “Most guests want to know what my inspiration was for any dish, and when they realize there is a connection between a dish and something in my life, they want to know about it and they want to try the dish,” he said. And there was one connection he was definitely not going to take off the menu: “Boodie,” the name of his mother.

1. The author uses the example of chicken liver to show that
  - イ. restaurants need to focus on one special dish to be successful.
  - ロ. some food items are not suitable as restaurant dishes.
  - ハ. restaurants often try to sell cheap items for a high price.
  - ニ. even plain food items can be made into appealing dishes.
  
2. The underlined word “tacky” (paragraph 3) is closest in meaning to
  - イ. cheap.
  - ロ. incorrect.
  - ハ. official.
  - ニ. sharp.

3. The underlined word “this” (paragraph 4) refers to
- イ. the economic recession.
  - ロ. the revolution in menu design.
  - ハ. the increase in restaurant customers.
  - ニ. the demands of restaurant hospitality.
4. One feature of dishes known as “decoys” (paragraph 5) is that they
- イ. are among the lowest-priced dishes on the menu.
  - ロ. lead diners to choose other dishes on the menu.
  - ハ. are among the most profitable dishes on the menu.
  - ニ. lead diners to spend a long time reading the menu.
5. The passage mentions all of the following ways to make menu items stand out on the menu EXCEPT
- イ. putting menu items in the top right-hand corner of the menu.
  - ロ. surrounding menu items with a dotted outline.
  - ハ. keeping descriptions of menu items as simple as possible.
  - ニ. adding extra white space around the menu items.
6. The underlined word “trigger” (paragraph 7) is closest in meaning to
- イ. conceal.
  - ロ. indicate.
  - ハ. reduce.
  - ニ. cause.
7. The most appealing way to write a menu price is
- イ. \$16.95.
  - ロ. 17.
  - ハ. Seventeen dollars.
  - ニ. \$16.99.

8. As a descriptive menu label, “homemade apple pie” is an example of
- イ. a geographic label.
  - ロ. a nostalgic label.
  - ハ. a sensory label.
  - ニ. a brand label.
9. One idea of the passage is that
- イ. menu labels can influence how diners experience the dishes they choose.
  - ロ. people generally prefer to order what they want regardless of price.
  - ハ. menu labels should not be connected to the lives of the restaurant owners.
  - ニ. the goal of most restaurant owners is to provide diners with a healthy meal.
10. The most appropriate title for this passage is
- イ. Restaurant Menus as an Artistic Production.
  - ロ. Recent Research on Diner Behavior.
  - ハ. Menus to Awaken the Appetite.
  - ニ. How to Make a Successful Restaurant.

II. 次の文を読み、下記の1～10それぞれに続くものとして、本文の内容ともっともよく合致するものを、各イ～ニから1つずつ選び、その記号を解答用紙の所定欄にマークせよ。

In 1991, the year that the lithium-ion battery was commercially released, no one foresaw the disruption that it would cause in personal electronics. After initially being used in portable music players and video cameras, lithium-ion batteries later found their way into, and led the development of, laptops, tablets and mobile phones—technologies that have permanently changed how much of society works.

Yet there is an even bigger revolution on the horizon. In the same way that telephones had a rotary dial for most of their existence, \*the electricity grid and cars have mostly existed in a single, unchanged format. But as we move beyond lithium-ion technology, a new generation of cheaper and more powerful batteries will completely rejig the power grid and lead to an age of electrically powered transportation.

Electric cars will replace imported oil with domestic electricity, use as little as one-fourth of the energy of petrol-driven cars per kilometer, emit significantly less carbon than conventional cars and, like mobile phones, provide a platform that supports apps that can do far more than just move the vehicle.

When both the \*\*drive-train and the computer controlling it are electronic, it will be easier for them to communicate, so smart electric cars will know the traffic ahead, decide when to change lanes or choose alternative routes, find and pay for parking, program your driving calendar so that your itinerary saves energy and time, schedule the next charge based on your driving day and, ultimately, take over driving completely, doing it more effectively and safely than humans while freeing drivers for more productive and interesting tasks. Speciality cars for uses such as commuting, weekend errands, family events or long holidays may replace today's general-purpose cars. For many, car ownership itself may be replaced by renting or sharing on a need-to-use basis. Transportation will be personalized in the same way that mobile phones have personalized communication and information.

The energy-storage revolution will also shake up the electricity grid. Access to adequate amounts of cheap energy storage will break the constraint that power must be generated at the same rate that it is used. Instead, we will have a “bank”

for electricity that can accept deposits and withdrawals at any time. Such flexibility is essential if renewable electricity is to become widely deployed.

Inexpensive energy storage will allow customers to “draw off” electricity when it is cheap, such as in the middle of the night, and store it until they need it. And if the customer has local power generation, such as a solar panel on the roof, smart technology will switch between drawing power from the grid, the solar panel or local batteries and storing electricity, thus improving efficiency and lowering the cost of electricity use.

Currently, excess energy generated by local solar panels is sold back into the grid, and the homeowner uses grid electricity when the sun is not shining. But in the future, power from solar panels could be stored locally and used later—so the homeowner might rely much less on the main grid, instead relying on their own “microgrid.” A neighborhood of homes sharing a large common battery would constitute an even more cost-efficient microgrid thanks to the economy of scale.

Commercial buildings, university campuses, factories and military bases would have different needs, requiring microgrids designed with their own special mix of storage, generation and use. Such diverse microgrids could serve their customers much more effectively than the one-size-fits-all approach of centralized utilities without storage.

A distributed, interacting network of microgrids would enable higher reliability and flexibility as well as security. A thunderstorm, hurricane or terrorist attack would not disable power for the entire network. Instead, surviving microgrids would share stored power with power-less neighbors.

How big will these changes be in energy and financial terms? In the United States, personal electronics account for about 2% of energy use, and make up most of the lithium-ion battery market, which is worth between \$15 billion and \$20 billion; transportation and the grid together account for nearly 70% of electricity use. If half of this transportation and grid energy was channelled through storage this would create a market of more than 15 times the current size.

What would it take to achieve these game-changing outcomes? One innovation: high-performance, inexpensive electricity storage. Simple estimates suggest that major improvements in performance and cost are needed to enable an inexpensive



electric car with a range of hundreds of kilometers, the replacement of fossil-fuel power plants with wind, solar and stored electricity, and the installation of compact, distributed storage in urban areas where land is expensive.

These drastic improvements will not come from gradual advances in today's lithium-ion technology; they will require conceptual innovations and qualitatively different approaches that go beyond lithium-ion technology. There are many promising technologies on the horizon that will allow batteries to store energy more efficiently and effectively.

Although the societal payoffs of electrified transportation and smart storage on the grid are substantial, the ultimate path to their development is uncertain and the risk of failure is high. Greater efforts by research organizations that can tolerate that risk, such as universities and national labs, are needed to identify and develop the most promising opportunities for next-generation energy storage. As the winning technologies emerge, the private sector will engage and deliver them to the public. As was true of the lithium-ion battery at its introduction in 1991, the challenges and opportunities are vast, rich and mostly unexplored.

\*the electricity grid : 電力網

\*\*drive-train : 動力伝達装置

1. One theme of the first paragraph is that
  - イ. the lithium-ion battery created problems for personal electronics.
  - ロ. social change depends on energy storage technology.
  - ハ. the technology of mobile devices has changed little since 1991.
  - ニ. we can't predict all the effects of a new technology.
  
2. The underlined word "rejig" (paragraph 2) is closest in meaning to
  - イ. redesign.
  - ロ. recognize.
  - ハ. resolve.
  - ニ. restore.

3. The main purpose of paragraph 4 is to describe how
- イ. computers operate inside electrically-powered cars.
  - ロ. the lithium-ion battery has transformed conventional cars.
  - ハ. new technology will change the way we use cars.
  - ニ. the use of public transportation is unlikely to change.
4. The underlined word “deployed” (paragraph 5) is closest in meaning to
- イ. abandoned.
  - ロ. constructed.
  - ハ. invested.
  - ニ. utilized.
5. The author uses the example of solar panels to make the point that solar power
- イ. tends not to be generated in excessive amounts.
  - ロ. can be stored locally for more efficient use.
  - ハ. will be the main source of energy in the future.
  - ニ. is not always reliable when the sun is not shining.
6. The passage suggests that microgrids of the future
- イ. will be managed by the central utilities.
  - ロ. will generate electricity at the same rate that it is used.
  - ハ. will be designed to meet the needs of each locality.
  - ニ. will be engineered to standardize energy consumption.
7. The passage suggests that, compared to a network of microgrids, the current centralized grid is
- イ. better able to provide power to localities that need it.
  - ロ. more vulnerable to natural disasters.
  - ハ. better able to provide electricity at a cheap price.
  - ニ. more dependent on energy storage technology.

8. Paragraph 10 indicates that, currently in the United States, lithium-ion batteries
- ㄱ. are used mainly in personal electronics.
  - ㄴ. account for 2% of total energy use.
  - ㄷ. are used mainly for transportation and grid energy.
  - ㄹ. account for 70% of total energy use.
9. The author would agree with all of the following EXCEPT that
- ㄱ. the lithium-ion battery was a revolutionary development.
  - ㄴ. the next generation of batteries is already here.
  - ㄷ. research on energy-storage technology is risky.
  - ㄹ. future innovations in energy storage will reduce energy prices.
10. The most appropriate title for this passage is
- ㄱ. How Personal Electronics Have Changed Society.
  - ㄴ. Lithium-ion Batteries: The Next Generation.
  - ㄷ. How Energy Storage Helps the Environment.
  - ㄹ. The Coming Revolution in Energy Storage.



IV. 次の空所(1)~(4)を補うのもっとも適当なものを、それぞれ対応する各イ~ニから1つずつ選び、その記号を解答用紙の所定欄にマークせよ。

A.

Jack: Tell me about yourself. ( 1 ) San Francisco?

Brian: Since I moved here for college. I'm originally from Los Angeles.

Jack: Cool. I'm working as an apprentice chef.

Brian: Wow, I'll have to check out your restaurant some time. San Francisco isn't cheap, is it?

Jack: No it's not. I'd like to find a roommate to share the rent.

Brian: ( 2 )

Jack: Well, yeah, but I guess I'd get used to it.

(1) イ. Are you originally from

ロ. Were you raised in

ハ. How long have you been living in

ニ. When are you moving to

(2) イ. But, wouldn't you mind living with someone you don't know?

ロ. That sounds like a practical idea.

ハ. Why don't you consider moving into my place?

ニ. Maybe you should consider getting a second job.

B.

Mother: This is Jane Clark, John's mother calling. I'm concerned about my son's grades.

Counselor: Would you like me to schedule a parent-teacher conference?

Mother: Yes, I would appreciate that.

Counselor: Okay, I'll go ahead and schedule a meeting. Will you be available next Monday, Wednesday or Friday?

Mother: ( 3 )

Counselor: Fine, I'll phone you tomorrow and let you know what time.

Mother: I'm mostly worried about my son's English grade.

Counselor: Well, I'll make sure that his English teacher is present.

Mother: I was happy to see how well he did in math.

Counselor: ( 4 )

Mother: No, there is no real need to speak to him.

Counselor: Okay, I'll talk to you tomorrow.

(3) ㄱ. I have to cancel my dentist appointment on Monday.

ㄴ. I'm afraid I'll be away next week.

ㄷ. Wednesday would be great.

ㄹ. I'm only free on Thursday next week.

(4) ㄱ. Yes, he did very well.

ㄴ. So I guess his math teacher need not attend.

ㄷ. His math teacher said he is strong in this subject.

ㄹ. Your son seems to like talking about math.

V. 次の空所(1)~(5)それぞれにもっとも適当な1語を補い、英文を完成せよ。解答は解答用紙の所定欄にしるせ。

The proportion of income that households spend on food, ( 1 ) as Engel's \*coefficient, is currently on the rise. However, the value of this coefficient should actually be on the decline, in ( 2 ) with the economic growth and improved standards of living.

Engel's coefficient in Japan was close to 40 percent in the first half of the 1960s, but then it fell ( 3 ) it reached about 23 percent in 1995. However, it then experienced an upward trend in 2005, rising above 25 percent in 2015.

A civil servant couple in their 40s living in Tokyo calculated their Engel's coefficient last year. The result was surprising: a higher-than-average 28.8 percent. They have two children in primary school, and if they return home late after work, they buy take-out food at stores in town or microwave frozen food. "This is fairly expensive but it requires ( 4 ) cooking time. I want to spend more time enjoying meals with my family," the wife said. On their days ( 5 ), the family almost always eats out.

\*coefficient : 係数

【以下余白】

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