

A 英語問題

注意

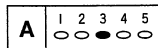
1. 試験開始の指示があるまでこの問題冊子を開いてはいけません。
2. 解答用紙はすべてHBの黒鉛筆またはHBの黒のシャープペンシルで記入することになっています。HBの黒鉛筆・消しゴムを忘れた人は監督に申し出てください。(万年筆・ボールペン・サインペンなどを使用してはいけません。)
3. この問題冊子は16ページまでとなっています。試験開始後、ただちにページ数を確認してください。なお、問題番号はI～Vとなっています。
4. 解答用紙にはすでに受験番号が記入されていますので、出席票の受験番号が、あなたの受験票の番号であるかどうかを確認し、出席票の氏名欄に氏名のみを記入してください。なお、出席票は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：



(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。

Wolfgang Amadeus Mozart was born in 1756, composed some of the world's greatest pieces of classical music, and died young in 1791. He was a genius. However, some people believe his music is able to reach parts of the brain other compositions can't, and can make you more intelligent. Moreover, they seem convinced that this effect is especially powerful with young impressionable minds, recommending that babies be exposed to a daily dose of Mozart for maximum impact. Their message has spread far and wide, but is it really possible to boost a youngster's brainpower using the magic of Mozart?

In 1993, researcher Frances Rauscher and her colleagues from the University of California published a scientific paper that changed the world. They had taken a group of 36 college students, randomly placed them in one of three groups, and asked each group to carry out a different 10-minute exercise. One group was asked to listen to Mozart's "Sonata for Two Pianos in D Major," the second group was played a standard relaxation tape, and the third sat in complete silence. Following the exercise, everyone completed a standard test designed to measure one aspect of intelligence, namely the ability to deal with *spatial information mentally. The results revealed that those who had listened to Mozart scored significantly higher than those subjected to the relaxation tape or complete silence.

Journalists soon started to report the findings. The *New York Times* music critic Alex Ross suggested, no doubt jokingly, that they had scientifically proved that Mozart was a better composer than Beethoven. However, some writers soon started to exaggerate the results, declaring just a few minutes of Mozart resulted in a substantial long-term increase in intelligence.

The idea spread like wildfire, and during the latter half of the 1990s the story changed even further away from the original research. Up to that point, not a single study had examined the effect of Mozart's music on the intelligence of babies. However, unwilling to let the facts get in the way of a good headline, some journalists reported that babies became brighter after listening to Mozart. These articles were not isolated examples of careless journalism. About 40 per cent of the

media reports published towards the end of the 1990s mentioned this alleged benefit to babies. The continued popular media's coverage of what was now being labeled the "Mozart effect" even impacted upon social policy. In 1998, the state of Georgia supported the distribution of free CDs containing classical music to mothers with newborns, and the state of Florida passed a bill requiring state-funded day-centers to play classical music on a daily basis.

The alleged Mozart effect had become transformed into an urban legend, and a significant slice of the population incorrectly believed that listening to Mozart's music could help boost all aspects of intelligence, that the effects were long-lasting, and that even babies could benefit. However, as the 1990s turned into the twenty-first century, the situation went from bad to worse. First, Christopher Chabris from Harvard University collected together the findings from all the studies that had attempted to reproduce Rauscher's original results, and concluded that the effect, if it existed at all, was much smaller than had originally been thought. Then, other work suggested that even if it did exist, the effect may have nothing to do with the special properties of "Mozart's Sonata for Two Pianos in D Major," and could in fact be associated with the general feelings of happiness produced by this type of classical music.

The public's belief about the alleged Mozart effect is a mind myth. There is almost no convincing scientific evidence to suggest that playing his piano music to babies will have any long-term or meaningful impact on their intelligence. Would it be fair to conclude that there is no way of using music to boost children's intelligence? Actually, no. In fact, evidence for the benefits of music exists, but it involves throwing away the Mozart CDs and adopting a more hands-on attitude.

Some research has shown that children attending music lessons tend to be brighter than their classmates. However, it is difficult to distinguish between two things just having a relationship and one thing causing another. It could be that having music lessons makes you brighter, or that brighter or more privileged children are more likely to take music lessons. A few years ago, psychologist Glenn Schellenberg decided to carry out a study to help settle the matter.

Schellenberg started by placing an advertisement in a local newspaper offering free weekly arts lessons to six-year-old children. The parents of over 140 children

replied, and each was randomly assigned to one of four groups. Three of the groups were given lessons over several months at the Royal Conservatory of Music in Toronto, while the fourth group acted as a control and didn't receive their lessons until after the study had finished. Of those who attended the lessons, one third were taught keyboard skills, another third were given voice training, the final third went to drama classes. Before and after their lessons, all the children completed a standard intelligence test.

The results showed clear IQ improvements in children who had been taught keyboard skills and given voice lessons, whereas those given drama lessons were no different to the control group. Why should this be the case? Well, Schellenberg believes that learning music involves several key skills that help children's self-discipline and thinking, including long periods of focused attention, practising and memorization.

Whatever the explanation, when it comes to boosting the brainpower of your children, perhaps it is time to take that Mozart CD out of the player and get the kids to play the piano.

*spatial : 空間の

1. The main finding of Frances Rauscher's experiment was that

- イ. certain kinds of music make college students relax.
- ロ. silence can improve students' intelligence.
- ハ. some kinds of exercise improve problem-solving skills.
- ニ. music can have an effect on thinking ability.

2. The main purpose of paragraph 4 is to show

- イ. how journalists exaggerated the results of Rauscher's study.
- ロ. that Rauscher's research method was not reliable.
- ハ. why the Mozart effect was limited to certain states.
- ニ. that journalists do not understand science well.

3. The underlined word “slice” (paragraph 5) is closest in meaning to
- イ. area.
 - ロ. period.
 - ハ. portion.
 - ニ. scale.
4. The purpose of Christopher Chabris’s study was to
- イ. examine media reports on the Mozart effect.
 - ロ. compare the effect of different kinds of music on intelligence.
 - ハ. review existing studies on the Mozart effect.
 - ニ. reproduce Rauscher’s research findings.
5. The underlined phrase, “adopting a more hands-on attitude” (paragraph 6) refers to
- イ. listening directly to Mozart CDs.
 - ロ. taking music lessons.
 - ハ. becoming more critical about music.
 - ニ. combining the study of music and art.
6. In Glenn Schellenberg’s experiment, all four groups of children
- イ. showed an improvement in intelligence.
 - ロ. received music lessons.
 - ハ. took the intelligence test twice.
 - ニ. had artistic skills at the start of the experiment.
7. Glenn Schellenberg’s experiment showed that
- イ. keyboard lessons have a different effect from vocal lessons.
 - ロ. brighter children tend to study music.
 - ハ. the study of both drama and music raises intelligence.
 - ニ. learning to act does not affect IQ score.

8. In Schellenberg's view, the effect of studying music is a result of the fact that such study

- イ. has a strong emotional effect that improves our happiness.
- ロ. helps the development of core learning skills.
- ハ. takes place over a long period of time.
- ニ. requires the regular taking of intelligence tests.

9. The passage suggests that the Mozart effect

- イ. has a powerful effect on brain development.
- ロ. only works with Mozart's piano music.
- ハ. can help people of all ages get brighter.
- ニ. cannot be considered valid.

10. The author would probably agree that

- イ. listening to music boosts people's intelligence.
- ロ. Mozart is the greatest composer of all time.
- ハ. Rauscher's research had little effect on public opinion.
- ニ. studying music could make children smarter.

- 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。

You're at a party. Music is playing. Glasses are clinking. Dozens of conversations are driving up the decibel level. Yet among all those distractions, you can focus on the one conversation you want to hear.

This ability to hyper-focus on one stream of sound among so many others is what researchers call the "cocktail-party effect." Now, scientists at the University of California in San Francisco have pinpointed where that sound-editing process occurs in the brain—in the *auditory cortex just behind the ear, not in areas of higher thought. The auditory cortex boosts some sounds and turns down others so that when the signal reaches the higher brain, "it's as if only one person was speaking alone," says principle investigator Edward Chang.

These findings, published in the journal *Nature* last week, make clear why people aren't very good at multitasking—our brains are designed for "selective attention" and can focus on only one thing at a time. That natural ability has helped humans survive in a world full of visual and auditory stimulation. But we keep trying to push the limits with multitasking, sometimes with tragic consequences. Drivers talking on cellphones, for example, are four times as likely to get into traffic accidents as those who aren't.

Many of those accidents are due to "inattentive blindness," in which people can, in effect, ignore things they aren't focusing on. Images land on our **retinas and are either boosted or played down in the visual cortex before being passed to the brain, just as the auditory cortex filters sounds, as shown in the *Nature* study last week. "It's a push-pull relationship—the more we focus on one thing, the less we can focus on others," says Diane M. Beck, an associate professor of psychology at the University of Illinois.

That people can completely fail to notice things in their field of vision was demonstrated famously in the "Invisible Gorilla experiment" created at Harvard in the 1990s. Observers are shown a short video of youths tossing a basketball and asked to count how often the ball is passed by those wearing white. Afterward, the observers are asked several questions, including, "Did you see the gorilla?"

Typically, about half the observers failed to notice that someone in a gorilla suit walked through the scene. They're usually flabbergasted because they're certain they would have noticed something like that.

"We largely see what we expect to see," says Daniel Simons, one of the study's creators and now a professor of psychology at the University of Illinois. As he notes in his book, *The Invisible Gorilla*, the more attention a task demands, the less attention we can pay to other things in our field of vision. That's why pilots sometimes fail to notice obstacles on runways and *** radiologists may overlook abnormalities on X-rays, especially in areas they aren't checking.

And it isn't just that sights and sounds compete for the brain's attention. All the sensory inputs compete to become the mind's top priority.

That's the real danger of distracted driving, experts say. "You regularly hear people say as long as your hands are on the wheel and your eyes are on the road, you're fine. But that's not true," Mr. Simons says.

Studies over the past decade at the University of Utah show that drivers talking on hands-free cellphones are just as unsafe as those on hand-held phones because it is the conversation, not the device, that is reducing their attention. Those talking on any kind of cellphone react more slowly and miss more traffic signals than other motorists.

"Even though your eyes are looking right at something, when you are on the cellphone, you are not as likely to see it," says David Strayer, a psychology professor and lead researcher. "Ninety-nine per cent of the time, it's not that critical, but that 1 per cent could be the time a child runs into the street," he adds.

Dr. Strayer's studies have also found that talking on a cellphone is far more distracting than conversing with a passenger—since a passenger can see the same danger on the road and doesn't expect a steady stream of conversation as someone on a cellphone does. Listening to the radio, to music or to a book on tape also isn't as distracting, because it doesn't require the same level of interaction as a conversation. But Mr. Simons notes that even drivers may miss some details of a book on tape if their attention is focused on changing lanes or other complex driving tasks.

Some people can train themselves to pay extra attention to things that are important—like police officers learn to scan crowds for faces and conductors can

listen for individual instruments within the orchestra as a whole.

And the Utah researchers have identified a rare group of “super-taskers”—an estimated 2.5 per cent of the population—who seem able to attend to more than one thing with ease.

Many more people think they can effectively multitask, but they are really shifting their attention rapidly between two things and not getting the full effect of either, experts say.

Indeed, some college professors have banned students from bringing laptop computers to their classrooms, even to take notes. Dr. Beck says she was surprised to find that some of her students were on Facebook during her lectures—even though the course was about selective attention.

Still, she doesn't plan to punish them. “I just explained that doing Facebook in class means you will not learn as much, which will have consequences on the exam,” she says.

Clearly, it is easier to combine some tasks than others. “Not all distractions are the same,” says Dr. Strayer. Things like knitting, cleaning and working out can be done automatically while the mind is engaged elsewhere. But doing homework and texting simultaneously isn't possible.

Even conversing and watching TV is difficult. “Just try conversing with your wife while watching football. It's impossible,” jokes Mr. Simons.

* auditory cortex : 聽覺中樞

** retina : 網膜

*** radiologist : 放射線技師

1. The “cocktail-party effect” refers to the ability to
 - イ. communicate with others in social settings.
 - ロ. do a variety of activities at the same time.
 - ハ. ignore others and listen to one's own thoughts.
 - ニ. focus on one thing despite many distractions.

2. The passage suggests that “selective attention” is
- イ. a problem we can overcome with effort.
 - ロ. the basis of multitasking.
 - ハ. a capacity we are born with.
 - ニ. not well understood by scientists.
3. One purpose of the “Invisible Gorilla experiment” was to show that
- イ. when attending to one thing we may miss another.
 - ロ. observing physical activity requires a lot of attention.
 - ハ. people forget much of what they have observed.
 - ニ. seeing is the same thing as understanding.
4. The underlined word “flabbergasted” (paragraph 5) is closest in meaning to
- イ. encouraged.
 - ロ. mistaken.
 - ハ. surprised.
 - ニ. unaware.
5. According to the passage, one reason that driving while talking on a cellphone is dangerous is that you
- イ. must drive with only one hand on the wheel.
 - ロ. are talking to someone without being able to see them.
 - ハ. must often take your eyes off the road.
 - ニ. are talking to someone who can't see the road conditions.
6. Dr. Beck was surprised to learn that her students were on Facebook during her lecture because
- イ. her students should have known it would distract them.
 - ロ. the final exam had no questions about Facebook.
 - ハ. she had stopped students from using laptop computers.
 - ニ. she will lower their exam score.

7. The combination of tasks we can perform with the least difficulty is
- イ. reading a novel and surfing the Internet.
 - ロ. working out and chatting.
 - ハ. watching TV and texting.
 - ニ. doing homework and talking to a family member.
8. The key factor in deciding how well we can multitask is
- イ. how much physical action is involved in the tasks.
 - ロ. whether different senses are used, for example ears and eyes.
 - ハ. how much attention each task requires.
 - ニ. whether the tasks involve some kind of social activity.
9. The author would probably agree that
- イ. people should focus on one complex task at a time.
 - ロ. multitasking is unnecessary in our society.
 - ハ. people should train themselves to be better multitaskers.
 - ニ. it is important to combine difficult tasks with easy ones.
10. The most appropriate title for this passage is
- イ. The Risks of Cellphone Use.
 - ロ. Current Research on Social Awareness.
 - ハ. How to Concentrate on Different Tasks.
 - ニ. Attention and its Limits.

Ⅲ. 次の文中の空所(1)～(11)を補うのにもっとも適当なものを、それぞれ対応する下記イ～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。

Jim: I was talking to a friend (1). He told me that, although he had originally planned to stay in his job, he (2) wanted to continue to work there. But I said to him that in these difficult times he should consider himself (3) to be employed.

Susan: Indeed! Many of my friends have been looking for jobs (4) success for ages. They just cannot find anything at all, (5) anything that matches their abilities.

Jim: I suppose he has forgotten just how tough things are (6) you are unemployed. He could have no job for a very long time. And what would his wife and family think of it?

Susan: Well, if I (7) his wife, I'd be pretty unhappy about it. When you have children to feed and rent to pay, there is a limit to (8) you can continue if you have no income, (9), of course, you have huge savings.

Jim: That's (10) my view. I'm going to try and persuade him to stay on in that job. Maybe he will see sense, if I explain it to him (11). But I hope he hasn't already told the company he's leaving.

- | | | | |
|------------------|------------------|----------------|---------------------|
| (1) イ. this day | ロ. the other day | ハ. last day | ニ. the previous day |
| (2) イ. never | ロ. neither | ハ. no longer | ニ. hardly ever |
| (3) イ. well | ロ. busy | ハ. unfortunate | ニ. lucky |
| (4) イ. without | ロ. for | ハ. to | ニ. with |
| (5) イ. even if | ロ. let alone | ハ. except for | ニ. not even |
| (6) イ. provided | ロ. considering | ハ. lest | ニ. once |
| (7) イ. am | ロ. were | ハ. would be | ニ. should be |
| (8) イ. how often | ロ. long time | ハ. the times | ニ. how long |
| (9) イ. if not | ロ. without | ハ. if | ニ. unless |
| (10) イ. in total | ロ. possibly | ハ. so long | ニ. exactly |
| (11) イ. in brief | ロ. overall | ハ. in detail | ニ. on time |

IV. 次の文中の空所(1)～(9)を補うのもっとも適当なものを、それぞれ対応する下記イ～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 boat came into a tiny Mexican village. An American tourist, Tony, (1) the Mexican fisherman on the quality of his fish and asked how long it took him to catch them. “(2),” answered the fisherman. “Then why didn’t you stay out longer and catch more?” asked Tony. The fisherman explained that his small catch was (3) to meet his needs and those of his family. Tony inquired, “But what do you do with the rest of your time?” “I sleep late, fish a little, play with my children, and take a nap with my wife. In the evenings I go into the village to see my friends, dance a little, play the guitar, and sing a few songs. I have a (4) life.” Tony interrupted rather rudely, “I have a Business Studies degree and I can help you. You should start (5) fishing longer every day. You can sell the extra fish you catch. (6) the money you get, you can buy a bigger boat, and catch even more fish. Then, you will soon be able to buy a second one and a third one and so on until you have an entire fleet of *trawlers. (7) selling your fish to a middleman, you can negotiate directly with the processing plants and maybe even open your own plant. You can then leave this little village and move to Cancun, Acapulco, Los Angeles, or even New York City. From there you can (8) your huge enterprise.” “How long would that take?” wondered the Mexican fisherman. “Twenty, perhaps twenty-five years,” replied Tony arrogantly. “And after that?” the fisherman asked. “After that you’ll be able to (9), live in a tiny village near the sea, sleep late, fish a little, play with your grandchildren, take a nap with your wife, and spend your evenings in the village, dancing, playing the guitar, and singing with your friends.” The fisherman sneered at Tony and walked away.

*trawlers : トロール船

- | | |
|-------------------------|-----------------|
| (1) イ. complimented | ロ. demanded |
| ハ. examined | ニ. inquired |
| (2) イ. A couple of days | ロ. I’m not sure |
| ハ. Not very long | ニ. Quite a bit |

- | | | | |
|------------------|------------------|------------------|---------------|
| (3) イ. abandoned | ロ. comprehensive | ハ. expensive | ニ. sufficient |
| (4) イ. careful | ロ. full | ハ. lonely | ニ. short |
| (5) イ. by | ロ. in | ハ. over | ニ. to |
| (6) イ. By | ロ. On | ハ. To | ニ. With |
| (7) イ. If you go | ロ. Instead of | ハ. On account of | ニ. When |
| (8) イ. direct | ロ. open | ハ. point | ニ. walk |
| (9) イ. expand | ロ. go on | ハ. retire | ニ. take back |

V. 次の1～4それぞれにおいて、与えられた日本文と同じ意味になるように、空所(イ)～(ヌ)に1語ずつ補って文を完成せよ。解答は解答用紙の所定欄にしるせ。

1. 中国との関係で外交方針には変更はないだろう。

There will be no change in diplomatic policy (イ)(ロ)(ハ) China.

2. 彼はどこまで本当の状況をわかっているのだろうか？

I wonder to (ニ)(ホ) he understands the real situation.

3. 日本はGNP（国民総生産）という点では豊かな国だが、天然資源には乏しい。

Japan is wealthy (ヘ)(ト)(チ) GNP is concerned, but it does not have many natural resources.

4. 外国に行ったならばその国の習慣に従って行動すべきだ。

When you visit a foreign country, you should act in (リ)(ヌ) the local customs.

【以下余白】

