

試 験 問 題

外 国 語

注 意

- (1) 解答時間は60分間です。
- (2) 試験開始の合図があるまで、問題冊子を裏返したり開いたりしてはいけません。
- (3) 試験監督者の指示があったら、**解答用紙左側の受験番号が自分の受験番号であることを確かめてから、その下に受験番号をマークし、所定の欄に氏名を書きなさい。**
- (4) **試験開始の合図があったら、問題冊子が1ページから10ページまで順序正しくそろっているかどうかを確かめなさい。**不備がある場合は着席のまま手をあげなさい。
- (5) 問題は10ページで、32問までです。
- (6) 問題冊子は切り離してはいけません。
- (7) 試験終了後、問題冊子は持ち帰りなさい。

——— 解答記入上の注意 ———

- (1) 解答はすべて解答用紙の解答欄に黒鉛筆(HB)でマークしなさい。
- (2) **各設問の解答欄に2つ以上マークした場合は無効です。**
- (3) 解答を訂正する場合はプラスチック消しゴムを使用してていねいに消し、消しクズが紙面に残らないように注意しなさい。

[A] 次の英文(各パラグラフに①～⑧の番号が付してあります)を読んで、後の 1 ～ 7 に答えなさい。

① Handwriting notes in class might seem *anachronistic as digital technology *subsumes nearly every aspect of learning. But a steady stream of research suggests that taking notes with pen and paper — or even *stylus and tablet — is still the best way to learn, especially for young children. And scientists are *zeroing in on why.

② For a study published recently in *Frontiers in Psychology*, scientists monitored brain activity in students taking notes and found that those writing by hand had higher levels of electrical activity across many interconnected brain regions. The findings add to a body of evidence that demonstrates the importance of teaching children to handwrite words and draw their own pictures.

③ The new research builds on a foundational 2014 study that suggested people may type notes quickly, without thinking much about what they're writing — but *transcribing in *longhand is slower and makes them actively pay attention to and process the incoming information. This conscious action of building on existing knowledge can make it easier for students to stay engaged and grasp new concepts.

④ To understand specific brain-activity differences during the two note-taking approaches, the authors of the new study sewed 256 *electrodes into a hairnet. These sensors let the scientists record 36 students' brain activity as they wrote or typed words displayed on a screen. When students wrote by hand, the sensors picked up widespread brain connectivity spanning visual regions, regions that receive and process sensory information, and the *motor cortex. This last area handles body movement and *sensorimotor integration, which helps the brain use environmental inputs to inform a person's next action. Typing, however, resulted in minimal activity in these brain regions.

⑤ “When you are (a), the same simple movement of your fingers is involved in producing every letter, whereas when you're writing by hand, you immediately feel that the bodily feeling of producing an A is entirely (b) producing a B,” says study co-author Audrey van der Meer, a neuropsychologist at the Norwegian University of Science and Technology. She notes that children who have learned to read and write by tapping on a digital tablet “often have difficulty distinguishing letters that look a lot like each other or that are mirror images of each other, like the b and the d.”

⑥ Across many contexts, studies have shown that kids appear to learn better when they're asked to produce letters or other visual items using their fingers and hands in a coordinated way. Vanderbilt University educational neuroscientist Sophia Vinci-Booher says the recent

study highlights the clear tie between motor action and conceptual recognition: “As you’re drawing a letter or writing a word, you’re taking this perceptual understanding of something and using your *motor system to create it.” That creation is then fed back into the *visual system, where it’s processed again — strengthening the connection between an action and the images or words associated with it.

⑦ Vinci-Booher notes that the new findings don’t mean technology is always a disadvantage in the classroom. Laptops, smartphones, and other such devices can be more efficient for writing essays or conducting research and can offer more equitable access to educational resources. But people are increasingly *‘‘off-loading’’ cognitive tasks onto digital devices, such as by taking a photograph instead of committing information to memory, says Yadurshana Sivashankar, who studies movement and memory at the University of Waterloo in Ontario. “If we’re not actively using these areas, then they are going to deteriorate over time, whether it’s memory or motor skills.”

⑧ Ultimately, Vinci-Booher says, “I think there’s a very strong case for engaging children in drawing and handwriting activities, especially in preschool and kindergarten when they’re first learning about letters. There’s something about engaging the fine-motor system and production activities that really impacts learning.”

[Hu, Charlotte. “Hands-on: Writing by Hand Comes with Learning Benefits.”

Scientific American, May 2024, p. 13.]

*anachronistic : 時代遅れの

*stylus : ペン型入力機器

*transcribe : 書き写す

*electrode : 電極

*sensorimotor : 感覚運動の

*visual system : 視覚系

*subsume : 包含する

*zero in on : ~に的を絞る

*longhand : 手書き文字

*motor cortex : (大脳)運動皮質

*motor system : 運動系

*‘‘off-load’’ : ゆだねる

1 According to paragraphs ① and ②, which statement is true?

1. Every young child handles pens and papers instead of styluses and tablets in class.
2. Scientists discovered handwriting increases the level of electrical activity across interconnected regions of the brain.
3. The study showed it is important to teach children how to move their whole body.
4. The use of digital technology is undoubtedly the best way to learn in classes.

2 According to paragraph ③, which statement is true?

1. People who type notes tend to pay closer attention to the notes than those who write notes by hand.
2. Students can understand new concepts better through handwriting than through typing.
3. The new research basically has no relationship to the prior study.
4. Writing by hand is slower than typing and has a disadvantage because writers take a long time to process information.

3 According to paragraph ④, which statement is true?

1. Sensors sewn into a hairnet told what words on the screen the student had typed.
2. The new study indicated visual regions of the brain became extremely active when students typed words.
3. There was no significant difference in brain activity between the two types of note-taking.
4. Widespread brain connectivity among multiple areas was detected in the brains of the students who wrote by hand.

4 According to paragraph ⑤, which is the most appropriate set of words that fits in the gaps (a) and (b)?

1. (a) handwriting (b) the same as
2. (a) tapping (b) the same as
3. (a) typing (b) different from
4. (a) visualizing (b) different from

5 According to paragraph ⑥, which of the following best describes what the underlined part (c) refers to?

1. motor system
2. perceptual understanding
3. that creation
4. the visual system

6 According to paragraph ⑦, which statement is true?

1. Active use of technology, such as digital cameras, helps us keep information in mind.
2. If people leave their cognitive tasks to digital devices, memory and motor skills will decline as time passes.
3. Using laptops and smartphones would be less efficient for writing essays or conducting research than using other digital devices, such as cameras.
4. Vinci-Booher points out that digital devices offer inappropriate access to educational resources.

7 According to paragraph ⑧, which statement is true?

1. The children in preschool and kindergarten prefer drawing to learning about letters.
2. The motor system of preschool and kindergarten children is more active than that of adults.
3. Using hand movements for drawing and handwriting probably has a great impact on learning.
4. Watching children engage in drawing reveals what letters they are learning.

[B] ()内に入る最も適当なものを選び、単語の意味を説明する英文を完成させなさい。

8 To () something means refusing to take notice of or acknowledge it.

1. encounter 2. examine 3. ignore 4. predict

9 () means that a place is extremely crowded and blocked with traffic or people.

1. Congestion 2. Duration 3. Inflation 4. Irrigation

10 Someone who is () is hopeful and confident about the future.

1. adequate 2. exceptional 3. optimistic 4. timid

11 To () means to jump or dive quickly into a particular thing or activity.

1. blur 2. float 3. lean 4. plunge

12 Something () is extremely large or great, particularly in scale or degree.

1. abrupt 2. contagious 3. immense 4. perpetual

〔C〕 下線部の意味に最も近いものを選びなさい。

13 The three of us will jump all at once, so please take a lot of pictures.

1. constantly
2. simultaneously
3. thoughtlessly
4. vigorously

14 Our team of mechanics is second to none in the car racing community.

1. gigantic
2. influential
3. obsolete
4. unmatched

15 The boss asked us to cut down on the amount of paper we use at meetings.

1. estimate
2. inspect
3. multiply
4. reduce

16 The sky changes from blue to orange by degrees.

1. dramatically
2. fundamentally
3. gradually
4. sufficiently

17 We need to hold off our decision to develop a new type of rocket.

1. contest
2. execute
3. postpone
4. reverse

[D] ()内に入る最も適当なものを選び、英文を完成させなさい。

18 Don't be afraid to ask questions, () you?

1. are 2. do 3. shall 4. will

19 The company launched three new products, none () failed.

1. in which 2. of which 3. that 4. which

20 John has never performed in front of () large an audience.

1. by 2. far 3. so 4. such

21 What () the weather like when you visited Paris last summer?

1. does 2. did 3. was 4. would

22 () the report was really submitted is in question.

1. That 2. Therefore 3. What 4. Whatever

[E] ()内に各1～6の語(句)をそれぞれ入れて日本語に合った英文を完成させなさい。解答は(23)～(27)に入る最も適当なものを選びなさい。

23 彼女にはプライドがあって、皆の前で間違いを認めることができなかった。

Her pride () () (23) () () () in front of everyone.

- | | | |
|----------|----------------|-----------|
| 1. admit | 2. allow | 3. didn't |
| 4. her | 5. her mistake | 6. to |

24 会社の方針や規則には従うしかありません。

You will have () () () (24) () () company policies and regulations.

- | | | |
|--------|-----------|-----------|
| 1. but | 2. choice | 3. comply |
| 4. no | 5. to | 6. with |

25 実験の結果は研究者たちが期待していたことに反するものだった。

The results of the experiments () () () (25) () () .

- | | | |
|-------------|-------------|--------------------|
| 1. contrary | 2. expected | 3. the researchers |
| 4. to | 5. were | 6. what |

26 公共の安全性を向上させるために新しい計画が実行に移されている。

The new plan () () (26) () () () improve public safety.

- | | | |
|-----------|----------|---------|
| 1. action | 2. being | 3. into |
| 4. is | 5. put | 6. to |

27 先生は週末までに評価しきれないほどの課題を抱えていた。

The teacher had () () (27) () () () by the end of the week.

- | | | |
|----------------|---------|----------|
| 1. assignments | 2. be | 3. could |
| 4. evaluated | 5. more | 6. than |

〔F〕 次の〔I〕, 〔II〕の会話の(28)～(32)に最も適当なものをそれぞれの選択肢から選んで入れ, 自然な対話になるようにしなさい。選択肢は一度しか使えません。

〔I〕

A : Son, the car looks dirty. You remember our deal about driving the car: you use it, you clean it.

B : I washed it last weekend, Dad. But it rained after that. (28)

A : I do. But I'd like you to wash it again this week because I'm picking up your grandma from the airport this weekend.

B : Grandma's coming for a visit? It's the first time in six years.

A : (29) That's why I want the car and everything looking good. Your sister is mowing the lawn, and we all need to clean the house.

B : Leave it to me, Dad. I'll get the car spick and span, inside and out!

1. I'll take care of the car later.
2. It's been quite a while.
3. Let's call it a day.
4. You know what it does to the car.

[II]

A : Paul, I saw a new poster on the cafeteria wall. It read, "Open Mic Contest." What does it mean?

B : That's a variety show on stage for poetry, magic, stand-up comedy, and such. Anything you want to try, Shinji?

A : Maybe. Are you familiar with Japanese-style comedy called *manzai*?

B : No. (30)

A : It's two people talking to each other. In doing so, they fall into one misunderstanding after another. One guy acts foolish. He's called the *boke*. The other guy seems more intelligent. He's the *tsukkomi*.

B : Oh, yeah. (31) In America, we call them the "funny man" and the "straight man."

A : This is my kind of thing.

B : I've got an idea. (32)

A : You mean doing *manzai* together for the Open Mic Contest? You're on!

1. Break it down for me.
2. Easier said than done.
3. I follow that.
4. Might we give it a shot?
5. There should be.
6. You've got it the wrong way around.