

平成 31 年度 金沢医科大学医学部入学試験問題
一般入学試験（後期）・編入学試験【英語】

1 Read the passage below and answer the questions 1 - 8 about it. Choose the most appropriate answers based on what is stated or implied in the passage.

Working memory is what brain scientists call the short-term store of information where we hold the contents of our consciousness at any 1 moment—all the impressions and thoughts that flow into our mind as we go through a day. In the 1950s, Princeton psychologist George Miller famously argued that our brains can hold only about seven pieces of information at the same time. Even that figure may be too high. Some brain researchers now believe that working memory has a maximum capacity of just three or four elements.

The amount of information entering our 1 consciousness at any instant is referred to as our cognitive load. When our cognitive load exceeds the capacity of our working memory, our intellectual abilities are badly affected. Information rushes into and out of our minds 2 quickly that we never gain a good mental grip on it. The information 3 before we have had an opportunity to transfer it into our long-term memory and build it into knowledge. We remember less, and our ability to think critically and conceptually weakens. An overloaded working memory also tends to decrease our concentration. After all, as the neuroscientist* Torkel Klingberg pointed out, “We have to remember 4 it is we are trying to concentrate on.”

Developmental psychologists and educational researchers have long used the concept of cognitive load in designing and evaluating educational techniques. They know that when you give a student too much information too quickly, comprehension goes down and learning suffers. But because of the incredible speed and volume of modern digital communication networks and tools, we are now 2 flooded with more bits and pieces of information than ever before. Everyone would benefit from understanding cognitive load and how it influences memory and thinking. The more aware we are of how small and delicate our working memory is, the better we will be able to monitor and manage our cognitive load. We will become more skillful in controlling the flow of the information coming at us.

There are times when you want to be flooded with messages and other information. The 5 sense of connectedness and stimulation is exciting and pleasurable. But it's important to remember that when it comes to the way your brain works, information overload is not just a metaphor*, it's a physical state. When you're engaged in a particularly important or complicated intellectual task, or when you simply want to enjoy an experience or a conversation, it's best to cut down on the information flow.

注*: neuroscientist = a scientist who deals with the structure and function of the brain and nervous system; metaphor = 比喻

1. For 1 - 5 in the passage, choose the most appropriate answer from each list.

1	① given	② once	③ soon	④ part of	⑤ constant
2	① as	② such	③ so	④ more	⑤ to
3	① vanishes	② destroys	③ deletes	④ rules out	⑤ throws out
4	① how	② who	③ when	④ what	⑤ that
5	① result	② resulted in	③ results of	④ results with	⑤ resulting

2. For 1 consciousness and 2 flooded, identify the most stressed vowel in each word, and choose ONE word from the list below that has the same vowel pronunciation as each word.

6	1 consciousness
7	2 flooded

① cat ② set ③ cut ④ food ⑤ home ⑥ high ⑦ hot ⑧ hit ⑨ date ⑩ bird ⑪ how ⑫ cook

3. Choose ONE statement that is FALSE or NOT stated in the passage.

8 ① The amount of information that our brains can keep in working memory is quite low.
② Our ability to think clearly decreases if the amount of information entering our brains at one time is greater than our working memory.
③ Researchers and psychologists are aware that giving students a lot of information too quickly makes them sick.
④ Knowing the limitations of our working memory would help us become better at controlling information flow.
⑤ We should try to limit the amount of information coming at us when we are doing a very challenging task.

2 Read the passage below and answer the questions 9 - 17 about it. Choose the most appropriate answers based on what is stated or implied in the passage.

In scientific texts, the authors will begin with the fundamentals of the discipline and build from there. The first few chapters should provide you with most of the background that you will need for all later chapters, so if you are going to spend more time on any one part, make it the beginning. 9, the beginning chapters are usually dull because background information is usually dull. It becomes a lot more 10 when the background you decided to skip shows up on a test, though, so don't leap ahead to the good stuff. Jumping into a difficult textbook midstream is like deciding you are going to become a doctor by practicing surgery on yourself. There are certain things you really need to know, and you are going to get hurt if you don't.

Some people view texts as bibles, to remain clean and untouched. « ① » Certainly your library does. « ② » That's because useful reading in scientific texts is done not only with the eyes, but also with a pen. « ③ » Mark up the book, underline, and take notes. « ④ » We cannot emphasize enough that this will improve your reading.

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« ⑤ » By doing this, you will not only know what is important to study when finals come around, but also where the good examples are that explain abstract principles. « ⑥ » Gravity, for example, is such a vague concept that when explained in abstract terms, it is easily misunderstood. But if you can think of gravity as a giant vacuum, sucking everything toward its center, then all of a sudden you have a [11] image of the effects of gravity, and it becomes easier to remember.

In scientific texts, ideas are usually broken into one idea per paragraph. Identifying that idea and summarizing it in the margin next to the paragraph is a good idea. In that way, you construct an outline of the chapter while reading it. When you need to memorize the important information from the chapter, you have an outline ready, and don't need to waste valuable time constructing one. If this sounds <1> overwhelming, think of the hard work it will save at the end of the semester.

Most specialized texts have their own language, their own specific vocabulary. Do you need to know the precise meaning of every term? Hardly. <2> It doesn't hurt to look up words you don't know, especially words that appear over and over in a text. Technical terms have the effect of making you sleepy, feel lost and confused. They may discourage your enthusiastic attitude in approaching the study materials. Do not let <3> them stop you from being a more effective reader.

The key to getting around technical vocabulary is not stopping at every word and looking it up. It is not efficient. By letting the word [12] itself in context, you can keep your reading rhythm without stopping and starting. This technique is important for keeping the pace of your reading as continuous as possible.

1. For [9] - [12] in the passage, choose the most appropriate answer from each list.

9	① Eventually	② Similarly	③ Gradually	④ Hopefully	⑤ Unfortunately
10	① excite	② excited	③ exciting	④ to excite	⑤ excitement
11	① character	② figure	③ proposed	④ positive	⑤ concrete
12	① reveal	② find	③ exchange	④ demand	⑤ match

2. Look at the brackets « ① » - « ⑥ », which indicate where the following sentence could be added to the passage. Choose a number from ① - ⑥ that indicates where the sentence would best fit.

[13] « If you are going to use a text often, it is important that you get your own copy. »

3. For <1> overwhelming and <2> It doesn't hurt, choose ONE answer for each that is closest in meaning from each list.

14	<1> overwhelming	① too much to do	② very useful	③ hard to estimate
		④ difficult to obtain	⑤ quite boring	
15	<2> It doesn't hurt	① It rarely happens	② No one cares	③ It has no value
		④ It is of some benefit	⑤ It is enjoyable	

4. What does <3> them refer to? Choose ONE answer from the list.

16	① specialized texts	② technical terms	③ the effect
	④ enthusiastic attitude	⑤ study materials	⑥ authors

5. Choose ONE statement that is TRUE from the following list.

17	① The author thinks it is not a very good idea to skip the beginning of a book even if it may seem uninteresting.
	② The most valuable books in school libraries are bibles and they should not be touched.
	③ To explain abstract ideas, using examples or images to make them easier to understand is not very useful.
	④ Identifying the main ideas while reading each chapter helps the author create an outline of the book.
	⑤ Although technical terms are very difficult to learn, you will have little trouble memorizing them.

3 Read the passage below and answer the questions [18] - [27] about it. Choose the most appropriate answers based on what is stated or implied in the passage.

A famous American writer Mark Twain said, "Quitting smoking is the easiest thing I've ever done. I've done it hundreds of times."

If fear motivates us to move away from something horrible, aspirational messages attract us toward something desirable. An aspiration is a desire to achieve a high level of success. Marketers often talk about the importance of being aspirational, offering someone something they desire to achieve and the ability to get there more easily with a particular product or service. "Six steps to a happier life." "How to lose 10 kilograms in less than a month!" "In six short weeks you can be rich." All these messages manipulate*. They attract us with the things we want to have or to become the person we want to be.

Though positive in nature, aspirational messages are most effective with those who lack discipline or don't have confidence in their ability to achieve their dreams (which, at various times for various reasons, is everyone). I always joke that you can easily get someone to buy a gym membership with an aspirational message, [18] to get them to go three days a week requires a bit of inspiration. Someone who lives a healthy lifestyle and is in a habit of exercising does not respond to "six easy steps to losing weight." It's those who don't have the lifestyle that are most easily influenced. It's not news that a lot of people try diet after diet in an attempt to get the body shape of their dreams. And [19] the method they choose, each comes with the qualification that regular exercise and a balanced diet will help improve results. In

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other words, discipline. Gym memberships tend to rise about 12 percent every January, as people try to fulfill their New Year's aspiration to live a healthier life. Yet only a fraction of those new members are still attending the gym by the end of the year. Aspirational messages prompt behavior change, but for most, it won't last.

Aspirational messages are not only effective in the consumer market. They also work quite well in business deals. Managers of companies, big and small, all want to do well, so they make decisions, hire consultants and introduce systems to help them achieve that desired outcome. But all too often, it is not the systems that fail but the ability to maintain **1** them. I can speak from personal experience here. I've started a lot of systems or practices over the years to help me achieve the success I desire, only to find myself back to my old habits two weeks later.

This short-term response to long-term desires **2** is alive and well in the business world, too. A management consultant friend of mine was hired by a billion-dollar company to help it fulfill its goals and aspirations. The problem was, she explained, whatever the issue, the company's managers were always **3** drawn to the quicker, cheaper option over the better long-term solution. Just like the habitual dieter, "they **20** have the time or money to do it right the first time," she said of her client, "but they always have the time and money to do it again."

注*： manipulate = cleverly control or influence someone or something

1. For **18** - **20** in the passage, choose the most appropriate answer from each list.

18	① another	② despite	③ for example,	④ but	⑤ furthermore,
19	① anything	② either	③ as long as	④ in relation	⑤ no matter
20	① whenever	② never	③ neither	④ even	⑤ always

2. What does **1** them refer to? Choose ONE answer from the list.

21	① aspirational messages	② business deals	③ managers of companies	④ decisions
	⑤ consultants	⑥ systems	⑦ desired outcome	

3. For **2** is alive and well and **3** drawn, choose ONE answer that is closest in meaning from each list.

22	2 is <u>alive and well</u>	① is healthy	② lives happily	③ is necessary	④ is very active	⑤ remains hidden
23	3 drawn	① attracted	② chosen	③ appealed	④ represented	⑤ written

4. Choose the most appropriate answers for the following questions.

24 Why does the author begin this passage with the quote about quitting smoking? Choose ONE answer.

- ① It introduces the various ways to quit smoking effectively.
- ② It is an aspirational message about how to achieve success in life.
- ③ It is an example of how difficult it is for some people to change a habit.
- ④ It demonstrates that you have to achieve the same goal many times.
- ⑤ It shows that bad habits like smoking can easily damage your brain.

25 What does an aspirational message aim to do first? Choose ONE answer.

- ① Change behavior
- ② Control weight
- ③ Discipline others
- ④ Increase wealth
- ⑤ Maintain habits

26 What happens shortly after the New Year begins? Choose ONE answer.

- ① The fee for a gym membership becomes expensive.
- ② Many gyms have a hard time getting enough people.
- ③ About 12 % of people leave the gym by the end of the year.
- ④ Compared to other times, more people register at the gym.
- ⑤ Quite a few new members lose interest and stop attending the gym.

27 Who would be least affected by an aspirational message? Choose ONE answer.

- ① Someone who believes that being happy is the solution to all problems.
- ② Someone who is trying to quit smoking.
- ③ Someone who has tried various diets.
- ④ Someone who has been exercising regularly for a long time.
- ⑤ Someone who manages a small company and wants to do better than now.

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4 Read the passage below and answer the questions [28] - [40] about it. Choose the most appropriate answers based on what is stated or implied in the passage.

As young people gain more insights* into themselves as thinking beings, they begin to realize that people have thoughts, beliefs, and intentions. They also understand that thoughts, beliefs, and intentions often [28] people to behave as they do. <1> Amazingly, even infants understand that people's behavior is often intentional, designed to achieve a goal. Imagine a father who says "Where are the crackers?" in front of his 1-year-old daughter and then begins opening kitchen cabinets, moving objects to look behind <2> them. Finding the box of crackers, he says, "There they are!" An infant who understands intentionality would realize how her father's actions (searching, moving objects) were related to the goal of finding the crackers.

Many clever experiments have revealed that 1-year-olds really do understand intentionality. For example, in one study, infants observed a woman who consistently seemed interested in one of two stuffed animals: she looked at it intently and seemed happy. Next, the woman picked up either that stuffed animal or the other one that she had ignored. By 12 months of age, infants seemed surprised to see the woman pick up the animal that she had ignored instead of the animal that had seemed interesting to her. Infants apparently inferred from the woman's behavior that she intended to pick up one animal and were surprised when she picked up the other instead.

From this early understanding of intentionality, young children's basic psychology [29] rapidly. Between 2 and 5 years of age, children develop a theory of mind, a basic understanding of the relations between mind and behavior. One <3> leading researcher on theory of mind, Henry Wellman, believes that children's theory of mind moves through several phases during the preschool years. In the earliest phase, preschoolers understand that people can have different desires: One child might want raisins for a snack while another child wants crackers. In the next phase, children know that people can have different beliefs: In trying to find a missing shoe, one child might believe that the shoe is in the kitchen while another child believes that it's in the car. In the third phase, children understand that different experiences can lead to different states of knowledge: A child who has seen a toy hidden in a drawer knows what's in the now-closed drawer, but a child who did not see the toy hidden does not. The following phase represents a fundamental shift in children's theory of mind: Children understand that behavior is based on a person's beliefs about events and situations, even when those beliefs are wrong. In the final phase, children understand that people may feel one emotion but show another. For example, a child who is disappointed by a birthday present smiles anyway [30] she doesn't want her parents to know how she really feels.

Thus, children's theory of mind becomes more advanced over the preschool years. This general pattern is found for children around the world, with one twist: The five-phase <4> sequence we described here is common in many Western nations, but in China and Iran, preschoolers typically understand differences in knowledge (phase 3) before differences in beliefs. One explanation for this difference is that compared to Western parents, parents in China and Iran <5> emphasize knowledge to their young children ("knowing the right things") and are less tolerant* of different beliefs.

The early stages of children's theory of mind seem clear to researchers. But just how this happens is a matter of debate. One view emphasizes the contribution of language, which develops rapidly during the same years that theory of mind emerges. Some scientists believe that children's language skills contribute to growth of theory of mind, perhaps reflecting the benefit of an expanding vocabulary that includes verbs describing mental states, such as think, know, and believe. Or the benefits may reflect children's mastery of grammatical forms that can be used to describe a setting where a person knows that another person has a false belief.

A different view is that a child's theory of mind emerges from interactions with other people, interactions that provide children with insights into different mental states. Through conversations with parents and older brothers and sisters that focus on other people's mental states, children learn facts of mental life, and this helps children to see that others often have different perspectives than <6> they do. In other words, when children frequently participate in conversations that focus on other people's moods, feelings, and intentions, they learn that people's behavior is based on their beliefs, regardless of the accuracy of those beliefs.

注*: insights = awareness; tolerant = able to accept or endure what others say or do

1. For [28] - [30] in the passage, choose the most appropriate answer from each list.

28	① share	② take	③ pull	④ have	⑤ drive
29	① expand	② expands	③ had expanded	④ to expand	⑤ are expanding
30	① because	② unless	③ even though	④ due to	⑤ so that

2. For the underlined sentence <1> Amazingly, even..., find the MAIN VERB of the sentence. Choose ONE answer from the list.

31	① even	② infants	③ understand	④ people's	⑤ behavior
	⑥ is	⑦ intentional	⑧ designed	⑨ achieve	⑩ goal

3. What does <2> them refer to? Choose ONE answer from the list.

32	① thoughts, beliefs, and intentions	② people	③ infants	④ people's behaviors
	⑤ father and daughter	⑥ crackers	⑦ kitchen cabinets	⑧ objects

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4. For **<3> leading**, **<4> sequence** and **<5> emphasize**, choose ONE answer that is closest in meaning from each list.

33	<3> leading	① instructing ② most recent ③ causing ④ heaviest ⑤ top
34	<4> sequence	① difference ② performance ③ dimension ④ series ⑤ stage
35	<5> emphasize	① stress ② attract ③ estimate ④ emerge ⑤ strike

5. What does **<6> they** refer to? Choose ONE answer from the list.

36	① parents ② older brothers and sisters ③ parents and older brothers and sisters
	④ mental states ⑤ children ⑥ facts of mental life
	⑦ others ⑧ perspectives

6. In the example study explained in paragraph 2, why were the 1-year-olds surprised by the woman's actions?
Choose ONE answer.

37	① She looked at the stuffed animal that the child was interested in. ② She picked up the stuffed animal that she did not seem to like. ③ She liked both of the stuffed animals, but she chose only one. ④ She gave one of the stuffed animals to another child. ⑤ She ignored both of the stuffed animals.
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7. Choose the most appropriate answers for the following questions.

38 In which phase does a child in a Western country find out that what she believes may not be the same as what others believe? Choose ONE answer.

- ① The first phase
- ② The second phase
- ③ The third phase
- ④ The fourth phase
- ⑤ The fifth phase

39 In which phase does a child figure out that people may behave based on wrong beliefs about situations?
Choose ONE answer.

- ① The first phase
- ② The second phase
- ③ The third phase
- ④ The fourth phase
- ⑤ The fifth phase

8. Which TWO theories would researchers most likely study next to understand how a child's theory of mind develops?

40	① The ability to understand and use numbers ② The strength of religious beliefs ③ The influence of language development ④ The effect of interacting with other people ⑤ The years and quality of education
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