

平成 24 年度 金沢医科大学医学部入学試験問題
一般入学試験（英語）

1

次の英文の [1] ~ [5] に入る最も適切な語句を、それぞれ①~⑤から 1 つ選びなさい。

- (1) Ms. Hofmann [1] it a rule to jog early in the morning every other day to maintain her health.
① makes ② takes ③ sets ④ gets ⑤ follows
- (2) The teachers are really concerned about [2] have been doing poorly in chemistry class.
① whom ② whomever ③ those who ④ anyone ⑤ what
- (3) I remember [3] the windows when I left my house this morning.
① to close ② closing ③ close ④ closed ⑤ to have closed
- (4) [4] a little more effort, he would have finished it by the due date.
① With ② In spite of ③ For ④ Of ⑤ Under
- (5) The tour guide was [5] of professional carelessness resulting in death.
① responded ② required ③ considered ④ noticed ⑤ accused

2

次の会話文の [6], [7] に入る最も適切な英文を、それぞれ①~④から 1 つ選びなさい。

- (1) A: Good morning, Mr. Brown. What seems to be the trouble today?
B: Well, I have a terrible pain in my back.
A: [6]
① Oh, really? It must have been quite difficult to do.
② Could you tell me when you first noticed it?
③ Have you already shown them to the doctor?
④ Is it possible to show you its front side?
- (2) A: I know you're busy, but I could use some help on this math assignment. It's just too hard for me.
B: No problem.
A: [7]
① I don't have a clue about what is going on out there.
② Thank you so much. I knew it would help them.
③ Great! You can always count on me, Bob.
④ How does after dinner Monday night sound?

3

次の英文を読み、問いに答えなさい。

It is well known throughout the medical community that if you treat a cold properly the symptoms will last a week—but if you leave the cold alone it will be gone in seven days!

Ah, the common cold...Throughout history scientists and physicians have [8], without success, for a reliable method to prevent a cold or treat it after it has settled in. There have been numerous attempts: The ancient tribes in South America, for example, treated colds with a mixture of chili pepper, honey, and tobacco. Three thousand years ago the Chinese employed a tea made from the same plant that produces a chemical currently used in some forms for the treatment of colds. One Roman scientist apparently believed it was possible to stop coughing and sneezing* by kissing a mouse's nose. About 800 years ago the Jewish scholar Maimonides recommended treating colds with a "medical" drink known as chicken soup. American pioneers actually used some animal oil, often mixing it with sugar, to clear the stuffed nose, as well as chicken fat and soups.

The common cold was [9] for the first time in print by the Greek physician Hippocrates in the fifth century B.C. [①] Hippocrates wrote that it was caused by a build up of "waste matter" in the brain. [②] Benjamin Franklin correctly thought that colds were caused by a substance passed through the air from one person's breath to be breathed in by another. [③] But it wasn't until the late nineteenth century that scientists proved a cold was an infectious disease. [④] The belief that it was caused by a bacteria—and therefore could be prevented by a vaccine*—persisted as late as the 1950s. [⑤] And it's during this same time period that products claiming to prevent or cure colds, or [10] the symptoms, have become a multibillion dollar business. [⑥]

Because colds are so common—we all get colds regularly—it would seem that conducting research would be easy.

英語

(4枚のうちの1)

平成 24 年度 金沢医科大学医学部入学試験問題
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But in fact, finding subjects for research and testing programs is actually extremely difficult. Colds come and go quickly, although never quickly enough. Nobody knows when they are about to get a cold—so of [11] most testing programs are based on laboratory-caused colds. For example, in an NIH*-supported study published in 2009 researchers at Pittsburgh's Carnegie Mellon University wondered if sleep patterns had any impact on either catching or resisting a cold. Because they couldn't simply wait for willing subjects to get a cold, they paid 153 volunteers \$800 each to allow a virus to be sprayed up their nose, then stay in a hotel for five days to see if they caught a cold. The normal sleeping habits of each person had been recorded for two weeks [12] the day they were given the virus. Tests proved that 135 of the 153 people were infected, but only 54 of them eventually displayed at least some classic cold symptoms, among (ア)them a runny nose, fever, tiredness, and a headache. These symptoms are produced by the immune* system's attempt to battle the cold. Why did some infected subjects come down with a cold while others successfully fought it off? Sleep. The subjects who averaged less than seven hours sleep a night in the two weeks before being exposed to the virus were three times more likely to catch a cold than those people who averaged eight hours or more. One reason for this, researchers believe, is that sleep makes the immune system stronger.

注*: sneezing くしゃみ (をすること); vaccine ワクチン; NIH = National Institutes of Health; immune 免疫

- (1) 文章中の [8] ~ [12] に入る最も適切な語句を, それぞれ①~⑩から1つ選びなさい。
ただし, 同じ語句は2度使えません。

① increased ② prior to ③ described ④ violated ⑤ difference
⑥ reduce ⑦ searched ⑧ continue ⑨ necessity ⑩ advanced than

- (2) 次の文が入る最も適切な箇所を, 文章中の【 ① 】 ~ 【 ⑥ 】 から1つ選びなさい。 [13]

It's only in the last half century that it has been proved that colds are caused by a virus.

- (3) 下線部(ア)them が指しているものを, ①~⑤から1つ選びなさい。 [14]

① tests ② 135 people ③ 153 people ④ 54 people ⑤ symptoms

- (4) 最も適切な答えを, それぞれ①~⑤から1つ選びなさい。

[15] Which of the following was NOT mentioned as examples of things used for preventing or treating a cold in the past?

① chicken fat ② a tea made from a plant ③ animal oil ④ chemical waste matter ⑤ tobacco

[16] Which of the following is the most appropriate title for the passage?

① The History of Cold Treatments in the U.S.
② Big Business: New and Innovative Medicine to Cure the Cold
③ Can You Prevent—or Cure—the Common Cold?
④ A Simple but Effective Medical Treatment for Colds
⑤ Battle Against Bacteria—Sleeping Patterns are the key

- 4 次の英文を読み, 問いに答えなさい。

Ask teachers how long they want their students to remember what they were taught, and the answer is a clear, "forever!" However, that is not usually the case. Much of what is taught in school is forgotten over time, sometimes within a few days. Forgetting is often viewed as the enemy of learning. But, in fact, forgetting plays an important role in promoting learning and (ア)facilitating recall.

The human brain processes an enormous amount of incoming information every day. Much of that information remains in temporary memory sites and soon disappears. For example, the name of a person that one has just met may remain in memory for just a few minutes. Yet the name of one's best friend is turned into a long-term memory and lasts a lifetime. Why do we forget so much and preserve so little? Forgetting manifests itself in two major ways: the process of [19] newly acquired information, and the decay that occurs with memories already in long-term storage.

The first major studies on forgetting were conducted by Hermann Ebbinghaus (1850–1909), a German psychologist, whose work led to the development of a forgetting curve. The curve was a mathematical representation of how quickly new experiences were forgotten. Subsequent studies have somewhat modified his findings. When the brain is exposed to new information, [A], and continues rapidly throughout the first day. Items that do not make sense to the learner are usually forgotten first. On the contrary, shocking and clear experiences are rarely forgotten, [B]. But for most information, forgetting slows down after two weeks when there is not much left to forget.

英語

(4枚のうちの2)

平成 24 年度 金沢医科大学医学部入学試験問題
一般入学試験 (英語)

Forgetting new material can occur as a result of interference* from earlier learning. This is a component of a process called transfer. Even how one acquires new learning can affect forgetting. For most people, it is easier to forget what is heard than what is read. When listening to new information, unrelated sounds can redirect the brain's attention. But reading is [20] more focused activity, so the effect of distractions* is reduced. Stress and lack of sleep also (イ)contribute to forgetting.

Forgetting has some definite advantages. When the brain is presented with a large amount of information, forgetting prevents unrelated information from interfering with the acquiring, remembering, and recall of related information. By screening out the unimportant, the essential data and experiences have a chance to be fully combined into long-term memories. Forgetting may be bothering, but it is most likely a survival adjustment of memory. There is [21] value in remembering everything that has happened to us. Forgetting the trivial leaves room for the more important and meaningful experiences that shape who we are and establish our individuality.

Imagine if the brain remembered everything for a lifetime. Just trying to recall the name of a childhood friend would be a significant challenge. The brain would have to search through thousands of names scattered among the long-term memory sites. At best, the name would take a long time to find; at worst, the result could be confusion, resulting in the recall of the wrong name. By gradually forgetting the names that are not important, [C]. Forgetting also helps to update old information. 《ウ》 As one changes jobs and moves, for example, new data, such as addresses and telephone numbers, overwrite the old data. The old data may still stay in long-term memory, but if it is not recalled and practiced, it will eventually become less accessible.

Exactly what happens in the brain to old memories over time is still an open question. Some researchers suggest that memory loss of a specific experience can occur if the memory has not been recalled for a long time. They believe that this leads to the slow but steady separation of the network of brain cells that form the memory, [D]. Eventually, the unity of the network fails and the memory is lost, perhaps forever. Such a process, the researchers say, frees up 《エ》 [_____ [24] _____ [25] _____] information.

注* : interference = a noun form of the verb 'interfere'; distractions = things that take your attention away from what you are doing or thinking about

(1) 文脈から下線部の語(ア),(イ)に意味の上で最も近いと思われる語句を, それぞれ①~⑤から1つ選びなさい。

- [17] (ア)facilitating ① assisting ② preserving ③ confusing ④ translating ⑤ delaying
[18] (イ)contribute ① give ② provide ③ present ④ lead ⑤ describe

(2) 文章中の [19] ~ [21] に入る最も適切な語句を, それぞれ①~⑤から1つ選びなさい。

- [19] ① taking off ② putting out ③ showing off ④ getting rid of ⑤ turning into
[20] ① an above ② a very ③ many ④ further ⑤ a much
[21] ① a few ② a little ③ little ④ none ⑤ not

(3) 「あ~え」はそれぞれ本文中の【 A 】~【 D 】に入る。最も適切な順番を, ①~⑩から1つ選びなさい。 [22]

あ. the recall process becomes more efficient

い. making getting back old memories increasingly difficult

う. although what we recall of them may change over time

え. the greatest amount of forgetting occurs shortly after the learning task is completed

- ① あ—う—い—え ② あ—う—え—い ③ い—う—あ—え ④ い—あ—え—う
⑤ い—え—あ—う ⑥ う—え—あ—い ⑦ う—あ—い—え ⑧ え—あ—う—い
⑨ え—う—あ—い ⑩ え—い—あ—う

(4) 下線部《ウ》の主語を, ①~⑤から1つ選びなさい。 [23]

- ① one ② jobs ③ data ④ addresses ⑤ addresses and telephone numbers

(5) 《エ》の空欄に入る①~⑤の語句を並べかえて文を完成させ, [24], [25] に入る語句を番号で答えなさい。

- ① available ② resources so ③ memory ④ for new ⑤ that they become

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(6) 本文の内容と合う英文を、①～⑦から 2 つ選びなさい。 [26]

- ① Much of the incoming information remains in temporary memory sites only for a short period of time.
- ② People often have difficulty remembering the names of their best friends.
- ③ Hermann Ebbinghaus was a German math teacher who invented a forgetting curve.
- ④ Shocking experiences tend to be forgotten first because people don't want to remember them.
- ⑤ It is generally more difficult to forget what is heard than what is read.
- ⑥ If we don't recall the old memory for a long time, it will become less reachable even if it is still in the brain.
- ⑦ The answer to exactly what happens to old memories in the brain over time has now been made clear to us.

5 次の英文を読み、問いに答えなさい。

As a young girl in New York, Whitney Johnson volunteered to deliver foods and clothes to the homeless. While majoring in psychology at Colorado College, she [27] an English-language teaching program for immigrant children. No one was surprised, then, when she chose to volunteer in an orphanage* in Khayelitsha, one of South Africa's poorest areas, [28] her junior year abroad. "I knew at a young age that volunteering was something I was meant to do," says Johnson.

At the orphanage, Johnson discovered that most of the children had been infected with HIV* at birth. Many 《ア》 [31] [32] them, or they were neglected by surviving relatives. Few were receiving the care they needed to stay healthy, [29] the government had made free drugs available. In fact, only about a quarter of the 330,000 children under 15 living with HIV in South Africa get the medicine they need. "The clinics are overcrowded and there is not enough money, staff and supplies," Johnson says. "I saw so many kids dying. When I left South Africa, all I wanted to do was go back and change what I had seen."

After (イ) graduating from college, Johnson began a fund-raising effort that eventually obtained enough money to [30] Ubuntu Africa (UBA), a nonprofit organization intended to provide services for HIV-positive children in Khayelitsha. In 2006, she opened her doors in a building across the street from a family-counseling center. It had grass growing through the floorboards, and it flooded on a regular basis, but it was a start.

Now the UBA center is housed in a church big enough for a few shared offices as well as the children. The staff includes counselors, a social worker, a nurse, a cook, and a handful of (ウ) volunteers, ensuring that each child has access to the proper medicine and treatment, a free healthy meal, and emotional support.

Knowledge, Johnson maintains, is extremely important to the kids' well-being too. Once a week, she makes sure the children receive age-appropriate lessons about AIDS. "When we first started, some of the kids didn't even know they had HIV," Johnson says. "They had been told they had asthma* and refused to receive treatments."

注*: orphanage 孤児院; HIV ヒト免疫不全ウイルスの略; asthma 喘息

(1) 文章中の [27] ~ [30] に入る最も適切な語句を、それぞれ①～⑤から 1 つ選びなさい。

- | | | | | | |
|------|---------------|-------------|-----------|---------------|--------------|
| [27] | ① imposed | ② required | ③ obeyed | ④ surrendered | ⑤ launched |
| [28] | ① with | ② during | ③ as for | ④ over | ⑤ as soon as |
| [29] | ① even though | ② as though | ③ without | ④ no matter | ⑤ however |
| [30] | ① found | ② regard | ③ display | ④ consider | ⑤ struggle |

(2) 《ア》の空欄に入る①～⑤の語句を並べかえて文を完成させ、[31], [32] に入る語句を番号で答えなさい。

- ① abandoned by ② care for ③ sick to ④ parents too ⑤ had been

(3) 下線部の語(イ), (ウ)と第一強勢のある母音の発音が同じ語を、それぞれ①～⑤から 1 つ選びなさい。

- | | | | | | | |
|------|-----------------------|-------------|--------------|--------------|------------|-----------------|
| [33] | (イ) <u>graduating</u> | ① capable | ② strategy | ③ literature | ④ endeavor | ⑤ communication |
| [34] | (ウ) <u>volunteers</u> | ① reduction | ② correspond | ③ pioneer | ④ nuclear | ⑤ employer |

(4) 次の問いに最も適切な答えを、①～⑥から 1 つ選びなさい。 [35]

Which one of the following was mentioned as what the staff of Ubuntu Africa do?

- ① Raise money to increase the number of nonprofit organizations in South Africa.
- ② Help HIV-positive children so that they can receive proper medical treatment.
- ③ Gather social workers from all over the world to help the poor in Africa.
- ④ Give counseling to the parents of HIV-positive children at the family-counseling center.
- ⑤ Provide a healthy meal that is inexpensive.
- ⑥ Receive age-appropriate lessons about AIDS once a week.