

平成22年度 入学試験問題

医学部 (I期)

英語・数学

注意事項

1. 試験時間 平成22年1月29日、午前9時30分から12時まで
2. 配付した試験問題(冊子)、解答用紙の種類はつぎのとおりです。
 - (1) 試験問題(冊子、左折り)(表紙・下書き用紙付)
 - 英語
 - 数学(その1, その2)
 - (2) 解答用紙
 - 英語 1枚(上端黄色)(右肩落し)
 - 数学(その1) 1枚(上端茶色)(右肩落し)
 - " (その2) 1枚(上端茶色)(左肩落し)
3. 下書きが下書き用紙で足りなかったときは、試験問題(冊子)の余白を使用して下さい。
4. 試験開始2時間以後からは退場を許可します。但し、試験終了10分前以降の退場は許可しません。
5. 受験中にやむなく外出(手洗い等)を望むものは挙手し、監督者の指示に従って下さい。
6. 退場の際は、この試験問題(冊子)を一番上にのせ、挙手し監督者の許可を得てから、試験問題(冊子)、受験票および所持品携行の上退場して下さい。
7. 休憩のための退場は認めません。
8. 試験終了のチャイムが鳴ったら、直ちに筆記をやめ、おもてのまま上から試験問題(冊子)、解答用紙[英語, 数学(その1), 数学(その2)]の順にそろえて確認して下さい。確認が終っても、指示があるまでは席を立たないで下さい。
9. 試験問題(冊子)はお持ち帰り下さい。
10. 監督者退場後、試験場で昼食をとることは差支えありません。ゴミ入れは場外に設置してあります。
11. 午後の集合は1時15分です。

英 語

1 次の文章を読んで、後の設問に答えなさい。

In the 1920s, a man named Sherashevsky came to the office of the Russian psychologist Aleksandr Luria. Thus began a 30-year study of the uncommon memory of this man Luria referred to simply as S. Luria's fascinating description of this study is contained in a little book entitled *The Mind of a Mnemonist**. When S. came to Luria's lab*, Luria initially studied him by giving conventional tests such as memorizing lists of words, numbers, or nonsense syllables*. He'd read the list once and then ask S. to repeat it. Much to Luria's surprise, he couldn't come up with a test S. could not pass. Even when 70 words were read in a row, S. could repeat them forward, backward, and in any other order. During the many years they worked together, Luria never found a limit to S.'s memory. In tests of his retention*, S. demonstrated that he remembered lists he had previously seen even 15 years earlier!

How did he do it? S. described several factors that may have contributed to his great memory. One was his unusual sensory response to stimuli—he retained a vivid image of things he saw. When shown a table of 50 numbers, he claimed that it was easy to later read off numbers in one row or along the diagonal because he simply had to call up a visual image of the entire table. Interestingly, when he occasionally made errors in recalling tables of numbers written on a chalkboard, they appeared to be “(ア)” errors rather than memory errors. For instance, if the handwriting was sloppy*, he would mistake a 3 for an 8 or a 4 for a 9. It was as if he was seeing the chalkboard and numbers all over again when he was recalling the information.

Another interesting aspect of S.'s sensory response to stimuli was a powerful form of synesthesia*. *Synesthesia* is a phenomenon in which sensory stimuli evoke* sensations usually associated with different stimuli. For example, when S. heard a sound, in addition to hearing he would see splashes of colored light and perhaps have a certain taste in his mouth.

After learning that his memory was unusual, S. left his job as a reporter and became a professional stage performer—a mnemonist. In order to remember huge lists of numbers or tables of words given by members of the audience trying to stump* him, he complemented his lasting sensory responses to stimuli and his synesthesia with memory⁽¹⁾ “tricks.” To remember a long list of items, he made use of the fact that each item evoked some sort of visual image. As the list was read or written, S. imagined himself walking through his hometown; as each item was given, he placed its evoked image along his walk—the image evoked by item 1 by the mailbox, the image for item 2 by this bush, and so on. To later recall the items, he walked the same route and picked up the items he had put down. Though we may not have the

complex synesthetic sensations of S., this technique of associating things with something we know well, such as our neighborhood, is one we all can use.

But not everything about S.'s memory was to his advantage. While the complex sensations evoked by stimuli helped him remember lists of numbers and words, they interfered with his ability to integrate and remember more complex things. He had trouble recognizing faces because each time a person's expression changed, he would also "see" changing patterns of light and shade, which would confuse things. He also wasn't very good at following a story read to him. Rather than ignoring the exact words and focusing on the important ideas, as most of us would do, S. was overwhelmed by an explosion of sensory responses. Just imagine how bewildering it would be to be bombarded* by constant visual images evoked by each word, plus sounds and images evoked by the tone of voice of the person reading the story. No wonder S. had trouble!

Another problem S. experienced, which is hard for us to appreciate, was the inability to forget. This became a particular problem when he was a professional mnemonist and gave numerous performances in which he was asked to remember things written on a chalkboard. He would look at the chalkboard and see things written there on many different occasions. He tried various tricks to try and forget old information, such as mentally erasing the board, but these didn't work. Only by the strength of his attention and by actively telling himself to let information slip away could he (イ). It was as if the effort most of us use for remembering and the ease with which we forget were reversed for S.

(Atkinson & Hilgard's *Introduction to Psychology* (15th ed.) by S. Nolen-Hoeksema, B. L. Fredrickson, G. R. Loftus, and W. A. Wagenaar. Cengage Learning EMEA, 2009.)

(注) mnemonist 記憶術師 lab = laboratory syllable 音節 retention 記憶力
sloppy いいかげんな synesthesia 共感覚 evoke ~を呼び起こす
stump ~に挑戦する bombard 攻めたてる

1. (ア)に入れるのに最も適切な語を一つ選びなさい。
A. learning B. drawing C. speaking D. describing E. reading
2. What surprised Luria?
A. S.'s uncommon memory was mentioned in the book entitled *The Mind a Mnemonist*.
B. S. passed all the tests that Luria gave to him.
C. S. could not pass the conventional tests given by Luria.
D. Luria was able to work with S. for many years.
E. S. was able to read as many as 70 words very fast.

3. How did S. recall a table of numbers written on a chalkboard?
- A. He described some factors that seemed to contribute to his memory.
 - B. He called up a visual image of the entire table and read off the numbers.
 - C. He arranged the numbers in a row or along the diagonal.
 - D. He tried to read the numbers quickly.
 - E. He read numbers on the chalkboard over and over again before memorizing them.
4. 下線部(1)の内容を説明するものとして最も適切なものを一つ選びなさい。
- A. He associated the route he walked with those items he had put down on his way.
 - B. He associated items he tried to memorize with the visual images they evoked.
 - C. He associated items that he tried to memorize with members of audience.
 - D. He associated a visual image evoked by each item he tried to memorize with something he knew well.
 - E. He associated the image of his walking through his hometown with that of his picking up the items he had put down.
5. Which is true about S.?
- A. When he memorized complex things, he always tried to keep them from evoking the complex sensations.
 - B. He was not good at recognizing faces because he could not follow the quick change of a person's expression.
 - C. It was difficult for S. to follow a story when someone read it to him.
 - D. He ignored the exact words and focused on the important ideas when he heard someone read a book.
 - E. He could not help wondering how bewildering it would be to ask someone to read a story to him.
6. (イ)に入れるべき語を同じ段落内から探して答えなさい。
7. 次の和文の空欄を埋めて下線部(2)の日本語訳を完成させなさい。
「それはあたかも_____かのようにだった。」

2 下線部の発音が他と違うものを一つ選び記号で答えなさい。

1. A. flew B. few C. crew D. drew E. screw
2. A. layer B. liar C. retire D. buyer E. admire
3. A. honest B. exhaust C. exhibit D. alcoholic E. honor
4. A. angel B. angry C. ancient D. ancestor E. another
5. A. exercise B. execution C. extinct D. explode E. executive

3 各文の()の中に入れるのに最も適切な表現を一つ選び記号で答えなさい。

1. I haven't seen the film yet, so don't () it for me by telling me what happens.
A. break B. throw C. spoil
D. bury E. disappoint
2. A 90 degree angle is called a () angle.
A. straight B. right C. rigid D. quarter E. square
3. She regulates her life carefully, () at least five-sixths of her free time to practicing the piano.
A. devoting B. mending C. donating D. spending E. paying
4. There's nothing () reading in this newspaper.
A. worthless B. worthy C. worth D. worth to E. worthily
5. If our ship () fewer passengers, the crew would not have to share rooms.
A. has B. had C. had had
D. will have E. would have
6. The girl () but at the last moment I rescued her.
A. drowned B. was drowned C. has been drowning
D. has drowned E. was drowning
7. Can you give me () on what to buy here?
A. some good advices B. some good advice C. a good advice
D. good an advice E. good some advices
8. He is a policeman () many years' experience.
A. of B. in C. for D. at E. from
9. Ms. Wilson wants to know where we will be staying () she needs to call us during our trip.
A. nevertheless B. so that C. unless D. even though E. in case
10. "What is your stand on the issue of brain death?" "I'm () about it. I don't have enough knowledge to make a judgment."
A. favor B. opposite C. agreeable
D. neutral E. protesting

4 各和文を英訳する時(1)～(15)の中に入れるべき英単語をそれぞれ答えなさい。

1. メスの蚊が誰を刺すかどうやって決めているのか知っていますか。

Do you know how the (1) mosquito decides (2) to bite?

2. あなたが謝ることはありません。私が悪いのです。

You have nothing to (3) (4). It's my fault.

3. 「これらの包みを一人で持てますか。」「両脇に抱えて行けばなんとかなるでしょう。」

"Can you carry these packages (5) (6)?" "I'm sure I can manage if I carry one (7) (8) arm."

4. 「免許証用の写真を撮ってほしいのですが。」「はい、縦 30 ミリかける横 25 ミリですね。」

"I'd like to have my picture (9) for a driver's license." "All right. You'll want one thirty-millimeters long (10) twenty-five millimeters (11), right?"

5. 「この本、全部処分していいですか。」「そこの 2 冊を残して、あとは全部捨ててかまいません。」

"Is it all right for me to get (12) (13) all these books?" "You can (14) them all away (15) for those two over there."

5 次の会話を読んで以下の問いに答えなさい。

James : This assignment that I got in Japanese class sounds really tough.

Kazu : When's it (ア) ?

James : I have to hand it in at the end of next month.

Kazu : Oh, you've got a whole month! Then what are you worried about?

James : I'm worried about whether I'll be able to hand it in (イ) time.

Kazu : Well, I suggest that you get started right (ウ).

James : That's true. I don't want to leave it (エ) the last minute. What would you say I should do to get information for it?

Kazu : I'd say you're better (オ) searching the Internet.

James : The Internet? That's a good idea. _____ (1)

Kazu : The only drawback with that is that it's sometimes hard to access a computer.

James : But _____ (2) I've got regular access to a computer. What else would you suggest?

Kazu : Well, _____ (3)

James : Yeah, I should get there before all the good books are gone.

Kazu : I'd strongly recommend that you look up information in journals.

James : Journals? Oh, yeah, I hadn't thought of that. . . . But _____ (4)

Kazu : Just ask one of the librarians to give you a hand.

James : But they don't speak English and my Japanese isn't quite good enough yet.

Kazu : _____ (5)

James : Yeah, I know that practicing is the best way to improve my Japanese, but. . . .

1. (ア) ~ (オ) に入れるのに最も適切な語を下の選択肢から選びそれぞれ記号で答えなさい。ただし、一つの語を二回以上選ばないこと。

選択肢 : A. away B. by C. from D. due E. off F. past G. to H. on

2. 下線部(1)~(5)に入れるのに最も適切な文を下の選択肢から選びそれぞれ記号で答えなさい。ただし、'I' を除いて文頭の語は小文字で始めています。

- A. I shouldn't have said it.
- B. that'll give me the most up-to-date research.
- C. don't be afraid of making mistakes.
- D. that's not a problem for me.
- E. you are the last person I want to ask.
- F. what time are you available?
- G. if I were you, I'd get to the library.
- H. I always feel so lost in the library.