

# 平成28年度 入学試験問題

## 医学部 (Ⅱ期)

### 英語・数学

#### 注意事項

1. 試験時間 平成28年3月5日、午前9時30分から11時50分まで
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時間以降は退場を許可します。但し、試験終了10分前からの退場は許可しません。
5. 受験中にやむなく途中退室(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. 休憩のための途中退室は認めません。
7. 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、下書き用紙および所持品を携行の上退場して下さい。
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解答用紙(英語、数学(その1)、数学(その2))、試験問題(冊子)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時です。

## 英 語

1 次の各組の単語について(1)~(3)は一番強いアクセントの位置が他と異なるものを, (4)~(5)は下線部の発音が他と異なるものを, それぞれ1つずつ選び, 記号で答えなさい。

- (1) A. com-mer-cial                      B. pro-fi-cient                      C. re-mem-brance  
D. sus-pi-cious                      E. tol-er-ate
- (2) A. cir-cum-stance                      B. im-mi-grant                      C. in-fa-mous  
D. op-po-nent                      E. rel-e-vant
- (3) A. ad-mi-ra-ble                      B. con-sid-er-ate                      C. ex-ag-ger-ate  
D. ma-nip-u-late                      E. spon-ta-ne-ous
- (4) A. anchor                      B. erase                      C. chaos                      D. label                      E. vague
- (5) A. course                      B. court                      C. journal                      D. pour                      E. source

2 次の各文の( )の中に入れるのに最も適切な表現を1つずつ選び, 記号で答えなさい。

- (1) My brother has trouble sleeping but is ( ) to take sleeping pills.  
A. expectant                      B. contrary                      C. worthy                      D. reluctant                      E. worrying
- (2) Management and the union are trying to resolve the ( ) over working conditions.  
A. distance                      B. dispute                      C. distinction  
D. disability                      E. disarmament
- (3) From ( ) I recall of him, I think he was an amiable young man.  
A. which                      B. that                      C. what                      D. these                      E. whom
- (4) Mary can hardly boil an egg, ( ) cook dinner.  
A. needless to say                      B. no matter                      C. much less  
D. in order to                      E. nonetheless
- (5) If he had taken my advice at that time, he ( ) happier now.  
A. would be                      B. were                      C. has been  
D. would have been                      E. will be

- (6) I will set (        ) early to avoid the heavy traffic.  
 A. up                      B. in                      C. off                      D. apart                      E. on
- (7) His coach has told him that he must win the game if (        ) as a great player.  
 A. he remembered                      B. he has to remember                      C. he is to be remembered  
 D. he will be remembered                      E. he has been remembered
- (8) There are cherry trees on (        ) side of the street.  
 A. either                      B. both                      C. every                      D. some                      E. none
- (9) We will be there on time, (        ).  
 A. provided that there is a suitable bus  
 B. a suitable bus there being  
 C. given that there is a suitable bus  
 D. suppose that there is a suitable bus  
 E. had we been provided with a suitable bus
- (10) I think this bag looks prettier, but it costs (        ) that one.  
 A. twice as much                      B. twice as much as                      C. twice much as  
 D. as twice much as                      E. as much as twice

**3** 次の各和文を英訳するとき、( あ )～( そ )の中に入れるべき単語をそれぞれ1語ずつ正しい形で答えなさい。ただし、(        )内にアルファベットが示されている場合は、そのアルファベットで始まる単語を答えること。

- (1) 田辺教授は昨年、東京大学で現代の日本の小説家について一連の講義を行った。これは最後から二回目の講義の録音である。

Professor Tanabe gave a series of lectures at Tokyo University last year on contemporary Japanese writers. This is a recording of the ( あ ) lecture but ( い ) of the series.

- (2) 高齢者の多くはさまざまな活動に参加しながら、いきいきと社会生活をしている。

Many ( す ) are leading active social lives, participating in a ( ら ) of activities.

- (3) そのような症状はこの病気と典型的には結びつかない。

Such symptoms are not ( と ) associated ( か ) this disease.

- (4) 身分証明書を持たない人がこのオフィスに絶対に入らないようにしてください。  
Please (s き ) to ( く ) that no one comes into this office without identification.
- (5) コンピュータ化で私たちは事務処理を大量にしなくてすむようになった。  
Computerization has enabled us to do ( け ) ( こ ) a lot of paperwork.
- (6) いくつかの会社が彼女を不合格にしたが、彼女はそのことでますます決意を固めただけだった。  
Several companies rejected her application, but that just made her all ( さ ) ( し ) determined.
- (7) ジャック：「トムがやっと貸していたお金を返してくれたんだ。」  
ジル：「遅くなっても返してくれないよりはましだね。」  
Jack: “Tom finally paid me the money he (o す ) me.”  
Jill: “Well, ( せ ) late ( そ ) never.”

**4** 次の各対話中の( あ )~( お )に入る表現として最も適切なものをそれぞれ選択肢から1つずつ選び、記号で答えなさい。

[対話 1]

Man 1: I have something to tell you.

Man 2: What is it?

Man 1: ( あ ), I won the first prize in the speech contest.

Man 2: Congratulations!

( あ )の選択肢

- A. Come to think of it
- B. Believe it or not
- C. More importantly
- D. No doubt
- E. No matter how hard I tried

[対話 2]

Woman 1: How many days are you going to take ( い ) from work?

Woman 2: I'm thinking of 10 days.

Woman 1: ( う ). You've been working so hard.

( い )の選択肢

- A. away
- B. off
- C. on
- D. up
- E. in

( う )の選択肢

- A. You must have been happy then
- B. You deserve the rest
- C. Anytime
- D. Long time no see
- E. It's not worth it

[対話 3]

Woman 1: Dr. Kimura, what do you like about your job?

Woman 2: Well, being a doctor is ( え ) because you are able to help your patients recover from illness.

Woman 1: What is the difficult part of being a doctor?

Woman 2: Patients need 24-hour care. Therefore, doctors must be ( お ) all the time, even at night and on holidays.

( え )の選択肢

- A. diligent
- B. resentful
- C. rewarding
- D. faithful
- E. truthful

( お )の選択肢

- A. cared
- B. existing
- C. current
- D. resident
- E. available



5 次の文章を読んで以下の設問に答えなさい。

- [1] Kelly Glazer Baron, who is a clinical psychologist at the Feinberg School of Medicine at Northwestern University, frequently heard complaints from her patients about exercise. They would work out, they told her, sometimes to the point of exhaustion, but they would not sleep better that night.
- [2] Dr. Baron was surprised. A fan of exercise for treating sleep problems, but also a scientist, she decided to examine more closely the day-to-day relationship between sweat and sleep. What she and her colleagues found, according to a study published last week in *The Journal of Clinical Sleep Medicine*, is that the influence of daily exercise on sleep habits is more complicated than many of us might expect and that, in the short term, sleep might have more of an impact on exercise than exercise has on sleep.
- [3] To reach that conclusion, Dr. Baron and her colleagues turned to data from a study of exercise and sleep originally published in 2010. For that experiment, researchers had gathered a small group of women (and one man) who had received diagnoses of insomnia\*. The volunteers were mostly in their 60s, and all were sedentary.<sup>(あ)</sup>
- [4] Then the researchers randomly assigned their volunteers either to remain inactive or to begin a moderate endurance\* exercise program, consisting of three or four 30-minute exercise sessions a week, generally on a stationary bicycle or treadmill, that were performed in the afternoon. This exercise program continued for 16 weeks.
- [5] At the end of that time, the volunteers in the exercise group were sleeping much more soundly than they had been at the start of the study. They slept, on average, about 45 minutes to an hour longer on most nights, waking up less often and reporting more vigor and less sleepiness.
- [6] But Dr. Baron wondered if the novice\* exercisers had experienced immediate improvements in their sleep patterns. And on a day-to-day basis, had working out on any given day produced better sleep that night?
- [7] By carefully examining the data for the new study, Dr. Baron discovered that the answer to both questions was a fairly resounding\* no. After the first two months of their exercise program, the exercising volunteers (all of them women) were sleeping no better than at the start of the study. Only after four months of the program had their insomnia improved.
- [8] They also rarely reported sleeping better on those nights when they had had an exercise session. And perhaps most telling, they almost always exercised for a shorter amount of time on the days after a poor night's sleep.

- [9] In other words, sleeping badly tended to shorten the next day's workout, while a full-length exercise session did not, in most cases, produce more and better sleep that night.
- [10] At first glance, these results might seem "a bit discouraging," Dr. Baron said. They also would seem to be at odds with the earlier conclusion that four months of exercise improved insomniacs' sleep patterns, as well as a wealth of other recent science that has found that regular exercise lengthens and deepens sleep.
- [11] But, Dr. Baron pointed out, most of these other studies employed volunteers without existing sleep problems. For them, exercise and sleep seem to have a relatively uncomplicated relationship. You work out, fatigue your body and mind, and sleep more soundly that night.
- [12] But people with insomnia and other sleep disturbances tend to be "neurologically\* different," Dr. Baron said. "They have what we characterize as a hyper-arousal\* of the stress system," she said. A single bout of\* exercise on any given day "is probably not enough to overcome that arousal," she explained. It could potentially even make it worse, since exercise is itself a physical stressor.
- [13] Eventually, however, if the exercise program is maintained, Dr. Baron said, the workouts seem to start muting a person's stress response. Her or his underlying physiological\* arousal is dialed down enough for sleep to arrive more readily, as it did in the 2010 experiment.
- [14] Of course, both of these studies were small, involving fewer than a dozen exercising volunteers, all of them middle-aged or older women. "We think the findings would apply equally to men," Dr. Baron said. But that idea has yet to be proved.

[Adapted from Gretchen Reynolds. How Exercise Can Help Us Sleep Better. *The New York Times*. August 21, 2013]

(注)

insomnia 不眠症      endurance 持久力      novice …し始めたばかりの  
 resounding 顕著な      neurologically 神経学的に  
 hyper-arousal 過剰覚醒      a single bout of ... 単発の      physiological 生理的

- (1) [3]の下線部(あ)とほぼ同じ意味で用いられている語を[4]から抜き出して書きなさい。
- (2) [10]の下線部(い)にあるように、今回の研究で判明したことが2010年に発表された結論と一致していないように思われるのはなぜか。理由を日本語で80字以内にまとめて書きなさい。

- (3) [12]の下線部(う)を, 2つの it が表す内容が明らかになるように日本語に訳しなさい。
- (4) [13]の下線部(え)の it が指している単語を[13]から抜き出して書きなさい。
- (5) 次の中から本文の内容に合っているものを3つ選び, 記号で答えなさい。
- A. Complaints from her patients motivated Dr. Baron to investigate whether regular exercises were truly effective in improving the sleeping patterns of her patients.
- B. Dr. Baron's recent study proved the general belief that sleep might have more of an impact on exercise than exercise has on sleep.
- C. In the experiment done in 2010, the participants could either remain inactive or not at their own will.
- D. In the 2010 experiment, the participants in the exercise group had to go through an intense exercise program prescribed by the researchers in order to overcome their insomnia.
- E. It was revealed in Dr. Baron's recent study that the exercises had the effect of easing the neurological arousal by stimulating his or her stress response.
- F. Dr. Baron thinks that the findings of her 2010 experiment turned out to be rather different from those of other similar experiments because her way of choosing the participants was different from that of the other experiments done by other researchers.
- G. Dr. Baron thinks that the relationship between exercise and sleep for the insomniacs can be deduced from the experiments done on healthy participants without any sleeping disorders.
- H. Further research may be necessary to prove that the results of Dr. Baron's recent research not only apply to women but also to men.