

(一般後期)

平成 29 年度 医学部入学試験問題

英 語

注 意 事 項

1. 問題は、指示があるまで開かないでください。
2. マークシートへの記入は、HB黒鉛筆又は0.5mm以上の芯のシャープペンシルとします。
3. 監督者の指示に従ってマークシートに受験番号・氏名を記入してください。
4. 試験問題の数は42問で、解答時間は60分です。
5. 問題はすべて択一です。1問に2つ以上解答したときは誤りとします。
6. 各問題には最大5個の選択肢があります。それぞれの問題に応じて、解答をマークしてください。

解答例)

1 2 3 4 5 とマークする。

7. 解答を修正した場合は、消しゴムであとが残らないように完全に消してください。

鉛筆の色が残ったり 1 2 3 4 5 のような消し方などをした場合は、修正したことはありません。

8. マークシートは折り曲げたり汚したりしないよう注意してください。

(問題用紙 1)

I. 次の英文の空所に入れるのに最も適切なものを、(ア)~(エ)の中から一つ選び、その記号をマークしなさい。

- (1) One is instantly (1) of America when "liberty" is mentioned.
(ア) ignorant (イ) reminded (ウ) speculated (エ) unconscious
- (2) Though smartphones are going to be useful for you, the courteous user will be (2) about the time and place of use.
(ア) prone (イ) superficial (ウ) discreet (エ) ignoble
- (3) I think the forest road construction should be (3) but over by now.
(ア) something (イ) nothing (ウ) whole (エ) all
- (4) All the efforts of the party's headquarters and the supporters to have their candidate elected (4) to be in vain.
(ア) approving (イ) recognizing (ウ) changed (エ) proved
- (5) According to blood type fortune telling, she and I aren't supposed to have much (5) between us.
(ア) congenial (イ) chemistry (ウ) compatible (エ) progresses
- (6) She says to everyone that she helped them, but in fact it was the (6) way around.
(ア) proper (イ) long (ウ) another (エ) other
- (7) His complete (7) in a tense situation made him seem older than he was.
(ア) composure (イ) fragility (ウ) juvenility (エ) folly
- (8) The critic pointed out some fatal defects (8) in the design of the Olympic Stadium.
(ア) inherent (イ) promising (ウ) elaborate (エ) exquisite
- (9) He fell down and skinned his knee, but (9) he was uninjured.
(ア) beside (イ) besides (ウ) moreover (エ) otherwise
- (10) He was vexed at her suggestion that he (10) at home and clean the whole house while she went on a vacation.
(ア) stayed (イ) stay (ウ) had stayed (エ) didn't stay

II. 次の各日本語の英訳として、文法や意味からみて最も適切なものを、(ア)~(エ)の中から一つ選び、その記号をマークしなさい。

- (11) 今、この市では喫煙は条例で厳しく制限されていて、ここで煙草を吸ったら、2千円の罰金をとられるんだ。
- (ア) Now there is a local compliance that puts strict restrictions on a chronic smoker in this city. Therefore you smoke here, and it'll cost you 2,000 yen.
- (イ) Now, we have a local regulation that restricts smoking in the city. We are going to fined 2,000 yen for smoking while walking.
- (ウ) We've got a strict citywide antismoking ordinance now, so if you smoke here, they'll fine you 2,000 yen.
- (エ) The city government have enacted an ordinance banning smoking while walking. And if you light up here, you will be sentenced to cost a penalty of 2,000 yen.
- (12) 実際、日本語と英語では語順が違う。長い文章で複雑なことを言った場合、同時に訳すことは不可能だ。
- (ア) In fact, the word order in Japanese is different from that in English; with long sentences on a complicated topic, we are incapable to interpret them at the same time.
- (イ) Actually, the word order is different between Japanese and English; so when it comes to long sentences expressing complex ideas, it is practically impossible to interpret them simultaneously.
- (ウ) As a matter of fact, the word orders vary from Japanese to English. When we say a complicated thing in a long sentence, it is unable for us to translate them at the same time.
- (エ) Japanese and English use different word orders in the first place, and so it is sure that simultaneous interpretation of a long sentences about complicated things is impossible.

(問題用紙 2)

- (13) 私たちの周りには、口数は少ないが、それでいて居ないと寂しい気のする人もいる。
- (ア) We have some people around us who are not talkative, but whom we will certainly miss when they are not here.
 - (イ) Some people near us may not say very much, but nevertheless we somehow want to see them whenever they are not existed around us.
 - (ウ) There is a person around us who talk very little. That kind of person sometimes let us loneliness whenever he is absence at hand.
 - (エ) In our circumference, there is a person of few words who makes us feel lonesome about his absence intentionally.
- (14) かつて日本は遙か遠い国であった。だが、今日東京の暮らしぶりはニューヨークに、パリにただちに伝わる。
- (ア) In the past, Japan was a country far away on the global. But these days, life in Tokyo has immediately conveyed even in New York and Paris and so on.
 - (イ) Once Japan used to be a very distant country. But today the lifestyles of people in Tokyo are introduced to New York and Paris in no time at all.
 - (ウ) Japan was a far-off country once. But today, the way of living in Tokyo hands down Paris and New York in the blink of an eye.
 - (エ) Once upon a time, Japan was a country in the remotest part of the world. However, the modern way of Tokyo lives are now spread to Paris and New York quickly.
- (15) あの医者は、貧富のへだてなく、どんな患者に対しても親切で労をいとわないから、とても評判がいい。
- (ア) The doctor does not distinguish a difference of the poverty from wealth and hardly minds trouble for what kind of patient. It is because his reputation is popular.
 - (イ) That doctor is very popular among his patients, because he is kind enough to be willing to take any trouble for them whether they are rich or poor.
 - (ウ) That doctor is kind and spares no pains for his patients in giving them a medical exam. So he has a good reputation among the disabled.
 - (エ) The doctor is kind for any patient whether they are rich or poor. In addition to this, he does mind even if there is troublesome. So the doctor has very good reputations.
- (16) 人物を知るには、その人の風貌や態度にとらわれてはなりません。大事なのは人格です。
- (ア) To know a person, we should not be influenced to his appearance and attitude. What is important is his character.
 - (イ) It is not looks and manners but character that should be the standard by which to judge a person fairly.
 - (ウ) When you are going to know a person, it is personality that you must not be adhered but looks and the manner of the person, and which is important.
 - (エ) In the case of a person judgment, it is what he looks like that we must put importance on, not being confused by visual appearance or his manner.
- (17) 現在は役に立たないように思える研究でも、長い目で見れば物を言うはずである。
- (ア) Any researches, even if they appear to be of no use will make the world understood the value of it some day.
 - (イ) Even those researches which seem to be of little use at present will probably count for much in the long run.
 - (ウ) We should take a long view of the study that seems to be useless, which never fails to result in a successive ending after a struggle.

(問題用紙 3)

(エ) Even studies without possibility for being helpful now will leave a result of excellence on us, if we take a long view as a whole.

(18) 私は写真に美しく賢そうに写ろうと思いつつ、すぐそういう自分が嫌になって、わざとしかめ面をしてしまう。

(ア) When I have my picture taken, I make an effort to look beautiful or clever, but I immediately grow disgusted with myself for feeling like that, and frown at the camera on purpose.

(イ) At photographing, I grew immediately disgusting with myself for wanting to appear more beautiful or a bit more clever and deliberately made a face at the camera.

(ウ) Just before photographed, I want to look beautiful and clever. However quickly such thought makes me feel sick and be grimaced at photographer.

(エ) While intending to appear to be smart and beautifully in the photograph, I fed up with myself and make a grimace on purpose.

Ⅲ. 次の語を並べかえて、適切な英文を完成させなさい。大文字と小文字の区別は考慮しないこと。解答は指定された箇所に入るものだけをマークしなさい。

(19) "What time do you think it is? I thought you may have gotten () and decided to come here to () () (19) of () your proposal."
(ア) me (イ) rejecting (ウ) talk (エ) drunk (オ) out

(20) In the stone age, there was only one way () () people could (20) great happenings from () () . It was to draw pictures on the walls of some caves.
(ア) being (イ) which (ウ) forgotten (エ) in (オ) keep

(21) "Is your family's discipline strict? Bad habits are () (21) get () () once () ."
(ア) of (イ) to (ウ) acquired (エ) hard (オ) rid

(22) Most decisions, by their very nature, cut both ways. Seldom () () decision produce () (22) are () good.
(ア) results (イ) any (ウ) only (エ) that (オ) does

(23) In order to () a () study of medicine, you () () well (23) in biology.
(ア) grounded (イ) be (ウ) deep (エ) must (オ) make

(24) So-called "() of the ()" refers to a () (24) only the () continue to live.
(ア) situation (イ) fittest (ウ) where (エ) survival (オ) strongest

(25) When is () not () appropriate to (25) () a () hand?
(ア) lend (イ) it (ウ) considered (エ) someone (オ) helping

(26) You cannot () () surprised to see (26) every creature is () to its () .
(ア) being (イ) adapted (ウ) how (エ) surroundings (オ) help

Ⅳ. 次の英文の空所に入れるのに最も適切な語句を、(ア)~(エ)の中から一つ選び、その記号をマークしなさい。

When asked why eating lots of fruits and vegetables can improve health, many people will point to the ※antioxidants in these foods. That reasoning is (27) because major diseases such as cancer, ※cardiovascular disease and diabetes (28) cell damage caused by chemicals called ※free radicals that antioxidants ※neutralize.

As a neuroscientist working to understand what goes wrong in the brain, I have long been aware that free radicals disrupt and sometimes kill neurons. And conversely, I know that people who regularly consume vegetables, fruits and other plant products thought to contain high levels of antioxidants tend to have healthier brains and to be (29) likely to suffer from ※neurodegenerative diseases. But the antioxidants story is not quite so simple.

(問題用紙 4)

Indeed, when rigorously evaluated in controlled trials in animals and humans, antioxidants, such as vitamins C, E and A, have (30) to prevent or control disease. How then do fruits and vegetables promote health?

The emerging answer has much to do with the (31) that plants have evolved over millions of years to protect themselves from pests. Bitter-tasting chemicals made by plants act as natural (32). When we eat plant-based foods, we consume low levels of these toxic chemicals, which mildly stresses cells in the body in much the same way that exercise or going without food for long periods does. The cells do not die — in fact, they get stronger because their response to the stress shores up their ability to (33) to still more stress. This process of strengthening cellular resilience is called hormesis — and a growing body of research indicates that it accounts for the health benefits of consuming fruits and vegetables. Understanding hormesis's (34) may even provide new ways to prevent or treat some of the most devastating brain diseases, including Alzheimer's, Parkinson's and stroke.

※ antioxidants 抗酸化物質 cardiovascular 心臓血管の free radicals 遊離基(不対電子をもつ原子または分子)
neutralize 中和させる neurodegenerative 神経変性の

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|-----------------------|----------------|-------------------|------------------|
| (27) (ア) unreasonable | (イ) legal | (ウ) confusion | (エ) logical |
| (28) (ア) involve | (イ) eliminate | (ウ) dissolve | (エ) prevent |
| (29) (ア) much | (イ) more | (ウ) less | (エ) fewer |
| (30) (ア) succeeded | (イ) stopped | (ウ) kept | (エ) failed |
| (31) (ア) opponents | (イ) strategies | (ウ) partisans | (エ) fortresses |
| (32) (ア) pesticides | (イ) resources | (ウ) circulations | (エ) sweets |
| (33) (ア) adapt | (イ) adopt | (ウ) oppose | (エ) contradict |
| (34) (ア) invalidity | (イ) effects | (ウ) counterresult | (エ) harmlessness |

V. 次の英文を読んで、後の問いに答えなさい

The video my colleagues and I shot is amazing. A sightless person is making his way down a long corridor strewn with boxes, chairs and other office paraphernalia. The man, known to the medical world as TN, has no idea the obstacles are there. And yet he avoids them all, here sidling carefully between a wastepaper basket and the wall, there going around a camera tripod, all without knowing (35). TN may be sightless, but he has "blindsight"—the remarkable ability to respond to what his eyes can detect without knowing he can see anything at all. We can see the film of the experiment.

(ア) TN's sightlessness is of an extremely rare type, caused by two strokes he suffered in 2003. (イ) The strokes injured an area at the back of his brain called the primary visual cortex, first on his left hemisphere and five weeks later on the right. (ウ) His eyes remained perfectly healthy, but with his visual cortex no longer receiving the incoming signals he became completely sightless. This study of TN navigating along the hallway is probably the most dramatic demonstration of blindsight ever reported. (エ) Other patients who have lost vision because of damage to the primary visual cortex have exhibited less spectacular but equally mysterious cases of the phenomenon—responding to things they cannot consciously see, ranging from simple geometric shapes to the complex image of a person's face expressing an emotion. (オ)

Today research into blindsight seeks to understand the range of perceptual abilities that may be retained by the cortically sightless and to determine which brain regions and neuronal pathways are (37). The knowledge being gained says something about us all, because even if we never suffer a catastrophic injury resembling TN's, the same unconscious brain functions manifest in him as the astonishing ability to see without knowing are surely a constant, (38) part of our own daily existence.

As long ago as 1917, doctors reported cases like blindsight—then called residual vision—in soldiers injured in World War I. Half a century would pass, however, before more organized and objective research into the capacity began. First, Lawrence Weiskrantz and his student Nicholas K. Humphrey, both then at the University of Cambridge, studied surgically altered monkeys in 1967. Then, in 1973, Ernst Poppel, Richard Held and Douglas Frost of the Massachusetts Institute of Technology measured the eye movements of a patient and found he had a slight tendency to look toward stimuli that he could not see consciously.

These discoveries spurred further systematic investigations of animals lacking the primary visual cortex (also called V1), most of them conducted by Weiskrantz and his collaborators. A number of studies established that animals retain significant visual abilities after removal of their visual cortex (for example, detecting movement and discriminating shapes).

(問題用紙 5)

Weiskrantz and his co-workers also began studies in 1973 with a person known as DB who had recently lost part of his visual cortex in surgery to remove a tumor. The wider research community, however, initially greeted reports of human blindsight with great (A).

Disbelief about blindsight is not surprising, because the phenomenon seems (40) counterintuitive, if not outright contradictory. After all, how could people see without knowing that they see? Just as it does not make sense to say that I do not know if I am in pain, it also does not make sense, on the face of it, to suggest that somebody can see something when he insists he is sightless.

Another reason for disbelief was the paucity of human evidence: subjects with cortical sightlessness who can be studied are rare. The primary visual cortex is only a few centimeters across in adults, and brain damage is seldom restricted to just that area, knocking out the patient's vision yet leaving other faculties intact enough for meaningful research on what the brain continues to perceive. Even so, it is now clear that many more patients with damage to the visual cortex have blindsight than scientists realized in the past, and (A) has decreased.

※cortex 皮質 residual vision 残存視覚

問 1 空所 (35) に入れるのに最も適切なものを、(ア)～(エ)の中から一つ選び、その記号をマークしなさい。

- (ア) he has made any special maneuvers.
- (イ) he is a mind reader.
- (ウ) he has been under surgery.
- (エ) he has regained his sight.

問 2 第 2 段落に、以下の文章を入れる際、最も適切な場所を、文中の(ア)～(オ)の中から一つ選び、その記号を(36)にマークしなさい。

Scientists have also induced a similar effect in healthy people, by temporarily "switching off" their visual cortex or by outfoxing it in other ways.

問 3 空所 (37) に入れるのに最も適切なものを、(ア)～(エ)の中から一つ選び、その記号をマークしなさい。

- (ア) unrecognizable
- (イ) ambiguous
- (ウ) vulnerable
- (エ) responsible

問 4 空所 (38) に入れるのに最も適切なものを、(ア)～(エ)の中から一つ選び、その記号をマークしなさい。

- (ア) invisible
- (イ) discarded
- (ウ) contaminated
- (エ) depressive

問 5 空所 (A) に共通して入れるのに最も適切なものを、(ア)～(エ)の中から一つ選び、その記号を(39)にマークしなさい。

- (ア) prestige
- (イ) admiration
- (ウ) skepticism
- (エ) integrity

問 6 下線部 (40) counterintuitive と意味の最も近いものを、(ア)～(エ)の中から一つ選び、その記号をマークしなさい。

- (ア) unemotional
- (イ) intangible
- (ウ) indifferent
- (エ) qualitative

(問題用紙 6)

問7 次の①～④の文章を意味の通るように並べかえて に入れるのに最も適切なものを(ア)～(エ)の中から一つ選び、その記号を(41)にマークしなさい。

- ① Nor do we always know that we cannot.
 - ② The relation between seeing and knowing is more complicated than we commonly assume.
 - ③ Yet we do not always know that we can see.
 - ④ For instance, people with normal sight have a blind spot, although we are not usually aware of this hole in our sight or handicapped by it.
- (ア) ③-①-②-④ (イ) ①-③-②-④ (ウ) ②-③-①-④ (エ) ④-①-②-③

問8 本文の内容と一致するものを、(ア)～(オ)の中から一つ選び、その記号を(42)にマークしなさい。

- (ア) From the brain's perspective, all incoming signals are not the same in nature.
- (イ) The brain doesn't receive only tiny electrical signals called neural impulses.
- (ウ) TN made a continuing effort for a long time before he retrieved his sight.
- (エ) Though TN's eyes are functioning perfectly, his brain has to learn how to see.
- (オ) The same ability to see something unconsciously as TN's constantly functions in our everyday life.

