

平成29年度 東北医科薬科大学入学試験問題

医学部 一般・外国語

《 注 意 事 項 》

1. 解答用紙左部に氏名、フリガナ、その下部に受験番号を記入し、例にならって○の中を塗りつぶすこと。

(例) 受験番号10001の場合

フリガナ	
氏名	

受 験 番 号				
万	千	百	十	一
1	0	0	0	1
●	●	●	●	○
②	①	①	①	●
②	②	②	②	②
⑨	⑨	⑨	⑨	⑨

2. この問題冊子は、●ページあります。

3. 解答方法は次のとおりである。

(1) 各問題には、正しい答えは一つしかないので、最も適当と思われる答えを一つ選び、次の例にならって解答用紙に記入すること。

※一つの問に二つ以上解答した場合は誤りとなる。

(例) 問1 東北医科薬科大学のある都市は次のうちどれか。

1. 札幌市 2. 青森市 3. 仙台市 4. 秋田市
5. 山形市 6. 盛岡市 7. 福島市 8. 横浜市


正しい答えは、3 であるので解答用紙の ③ を塗りつぶして

解答 番号	解 答 欄									
	1	2	3	4	5	6	7	8	9	10
1	①	②	●	④	⑤	⑥	⑦	⑧	⑨	⑩

とすればよい。

(2) 解答の作成にはH、F、HBの黒鉛筆を使用し、○の中を塗りつぶすこと。黒鉛筆以外のもの(シャープペンシル等)を使用した場合には、解答が読み取れないことがあるので使用しないこと。

尚、解答以外に印をつけた場合は、必ず消しておくこと。

(3) 答えを修正した場合は、プラスチック製の消しゴムであとが残らないように**完全に消すこと**。鉛筆のあとが残ったり、のような消し方などした場合は、修正または解答したことにならないので注意すること。

(4) 解答用紙は折り曲げたり、メモやチェック等で汚したりしないよう、特に注意すること。

4. 問題の内容については、質問しないこと。

(問題冊子は回収しません)

第1問 次の英文を読み、問い（問1～5）に答えよ。

This year's U.N. report on tuberculosis (TB) was a shocker. The World Health Organization's Global TB Report 2016 said the spread of the disease is larger than previously estimated, and that global efforts to beat it are falling far short of what is needed.

(ア) the overall number of TB deaths continues to fall across the globe, new data showed 50 percent more cases exist in India than previously thought, so the total number of cases worldwide has increased from 9.6 million to 10.4 million. Six countries—India, Indonesia, China, Nigeria, Pakistan and South Africa—(1)account for 60 percent of the total number of people with TB.

Dr. Eric Goosby, the United Nations Special Envoy on Tuberculosis, told *Voice of America* in a Skype interview that because of better surveillance, the numbers are more accurate. (1) But on the other hand, he said, not all cases of TB are being counted, because many countries have outdated surveillance systems.

Scientific modeling shows that more than four million people with TB are not being treated, but no one knows where they are. (2) That, Goosby said, is what worries him.

"TB is the threat that can be spread by an aerosolized spread: not by behavior that increases your risk, but by standing behind somebody in line who coughs and infects you with a micro-bacterium. No high-risk behavior associated with it, other than being in the wrong place at the wrong time." (3)

(イ) weeks after exposure to tuberculosis, a person develops a cough, fever, night sweats, then starts to lose weight. TB usually attacks the lungs, but it can attack any organ. It kills 5,000 people a day, more than the number of people who die of malaria and HIV. (4) "And we cannot find it in our country budgets to prioritize TB as a health threat," Goosby said.

Like Ebola, tuberculosis thrives in poor communities, where people live in crowded conditions with poor sanitation and poor nutrition. (5)

As the world learned with Ebola, diseases don't stay put. Modern

travel took the Ebola virus around the world, and it can do the same with TB. Yet, Goosby said, people have become complacent about this killer disease.

“Our political will has waned, and it has been de-prioritized in ministries of health as the urgent, emergent disease to respond to. (ウ), we see TB beginning to increase in the number of deaths it’s causing,” the U.N. official told VOA. “We are now at a death rate of 1.8 million a year, which puts TB as the number-one infectious disease killer on the planet.”

“We can diagnose it, we can treat it with effective anti-microbial drugs, and cure it in about 90 percent of cases with the current drugs that are available.”

The need to find and treat people with TB is urgent because the disease is developing a (2)resistance to the two most potent TB drugs. The WHO views drug-resistant tuberculosis as a public health crisis that needs to be stopped.

Based on WHO estimates, some 480,000 people (3)contracted multi-drug resistant TB in 2015—more than half of them in India, China and Russia. And most people who have multi-drug resistant TB are not getting proper treatment.

As for the millions of cases that are undocumented, Goosby said, “Every country should know what their portion of that 4.3 million is, and on a geo-mapping level, map out where those new infections are, go find them, identify them and retain them in care. It’s got to be that pro-active.”

As the United Nation’s special envoy on TB, Goosby’s challenge is to get presidents and their ministers of health and finance to see how (4)perilous the TB epidemic is.

If all countries cooperate, TB can be stopped, Goosby says. The goal is to end the disease by 2030. It’s a tall order, but Goosby was a player in the global effort to bring HIV under control. He says it can be done.

(*Voice of America*, October 22, 2016 一部改変)

問1 次の一文は、本文中の空欄(1)～(5)のどこに入れるのが最も適当か。①～⑤の中から一つ選び、その番号をマークせよ。

This means the disease is spreading undetected.

- ① 空欄(1) ② 空欄(2) ③ 空欄(3) ④ 空欄(4)
⑤ 空欄(5)

問2 本文中の空欄(ア)～(ウ)に入る最も適当なものを①～⑤の中から一つ選び、その番号をマークせよ。

[1] 空欄(ア)

- ① Although ② For ③ If ④ Unless ⑤ With

[2] 空欄(イ)

- ① Alongside ② Considering ③ Despite ④ Regarding
⑤ Within

[3] 空欄(ウ)

- ① As a result ② At the latest ③ By now ④ In turn
⑤ On the contrary

問3 本文中の下線部(1)～(4)の語句の意味に最も近い語を①～⑤の中から一つ選び、その番号をマークせよ。

[1] 下線部(1)account for

- ① accommodate ② exceed ③ generate ④ occupy ⑤ succeed

[2] 下線部(2)resistance

- ① betrayal ② exclamation ③ insulation ④ obstruction
⑤ tolerance

[3] 下線部(3)contracted

- ① caught ② cured ③ diagnosed ④ prescribed ⑤ reported

[4] 下線部(4)perilous

- ① hazardous ② innate ③ intermediate ④ superb ⑤ visible

問 4 本文にタイトルを付けるとしたらどれが最も適当か。①～④の中から一つ選び、その番号をマークせよ。

- ① New Treatment for TB Developed in the U.S.
- ② Global Efforts to Control TB Falling Short
- ③ TB Becoming a Fatal Disease
- ④ TB Needs to Develop More Resistance

問 5 次の[1]～[5]の文の内容が本文の内容と一致する場合は①を、一致しない場合は②をマークせよ。

[1]

More than four million people with tuberculosis have already received medical treatment.

[2]

The number of deaths from tuberculosis is larger than that from malaria and HIV.

[3]

Like Ebola, travelers can become the source of a worldwide TB epidemic.

[4]

There is a possibility that tuberculosis is trying to develop a resistance to almost all potent TB drugs.

[5]

Eric Goosby believes that tuberculosis cannot be eliminated until the end of this century.

第2問 次の英文を読み、問い（問1～5）に答えよ。

It may be a common ailment for our elderly population in the not-so-distant future. The health ministry's latest estimate is that the number of people aged 65 or older suffering from dementia will reach 7 million in 2025, or one out of five people in that age group.

The government, which recently adopted a new strategy on measures against dementia, needs to follow through on the idea of ensuring a better quality of life for patients by heeding the wishes of sufferers and their families.

The new strategy was hastily put together in about two months after Prime Minister Shinzo Abe, who spoke at an international conference on the issue held in Tokyo in early November in 2014, (ア) the order to the government. It expands on the Health, Labor and Welfare Ministry's five-year program started in fiscal 2013, which was based on the policy adopted by the previous Democratic Party of Japan-led administration.

It (イ) introduction of dementia diagnosis training to enable early-stage treatment and care of the patients, as well as research and development of ways to prevent and treat the disease—with a goal of establishing a method for early diagnosis by the end of fiscal 2015 and starting clinical trials toward a cure by around 2020.

(1)Dementia, a progressive neurological condition that tends to affect more people as they advance in age, has been linked to abnormalities in brain cells as well as lifestyle-related diseases such as diabetes and arteriosclerosis, but no cure has been established for the illness. Alzheimer's is said to be the most prevalent type of dementia, affecting two-thirds of all patients, but the medicines currently available only slow the progression of the patients' conditions.

There were an estimated 4.62 million patients in 2012, along with 4 million others who suffer from light cognitive disorders and have a risk of developing dementia symptoms, according to the health ministry.

In recent years, there have been alarming reports of dementia sufferers (a). Roughly 10,000 such cases are reported each year. Increasingly reports of patients (ウ) accidents and consumer-related fraud also have been highlighted as serious social problems.

(2)The issue of people quitting jobs to care for their elderly relatives suffering from dementia has come to the fore, along with an increase in the number of younger-generation people developing the symptoms.

One characteristic of dementia treatment in Japan has been the large number of patients hospitalized at mental institutions. As of 2011, roughly 53,000 such patients were being treated at mental hospitals, with roughly 30,000 of them hospitalized for longer than a year. These figures are much higher than are reported in other advanced economies, where patients are more commonly cared for at their residences or at nursing homes for the elderly.

People involved in nursing care have long advocated a shift in emphasis to early-stage diagnosis and care, which could slow the progression of patients' conditions and enable them to continue living with their families at their homes. It was only in the health ministry's five-year program that support for home-care of dementia patients was set out as a new direction in the government's policy.

The government's updated strategy (1) having 60,000 doctors nationwide in training for early diagnosis by fiscal 2017, and expanding such training to dentists, pharmacists and nursing-care workers.

The government aims to set up a team of doctors and public-health nurses who would visit the homes of patients in the early stages of the illness to provide advice and support for them and their families at all of the nation's municipalities beginning in fiscal 2018. At present, they are deployed in 41 cities and towns. Improved community-level support through closer cooperation by medical and nursing care services is included as a goal.

A major point of the strategy, which (1) "creating an environment for people with dementia to lead a better life," is its stated emphasis on reflecting the viewpoints of patients and their families in government policy.

It is a welcome development, given that discussions on policies for medical and nursing-care systems in this country are mostly driven by government bureaucracy and the representatives of doctors and care-service providers.

(3)It is not clear whether the opinions of dementia patients and their

families have sufficiently been sounded out in devising the new strategy in just two months. Listening to the opinions of patients and their families will be an ongoing process that should not end with merely compiling a new policy. The government needs to follow through on its words and take effective steps to make that happen.

In the final stage of compiling the strategy, some words are said to have been added to the text to (b)play up the roles of mental hospitals in the treatment of dementia patients—reportedly at the urging of Liberal Democratic Party lawmakers backed by hospital organizations.

This smacks of political pressure at work to water down the new direction in government policy. Whether the government is really committed to the new policies in dementia treatment and care of the patients will be tested when the strategy is implemented.

(*The Japan Times*, February 5, 2015 一部改変)

問 1 次の[1]～[5]の文の内容が本文の内容と一致する場合は①を、一致しない場合は②をマークせよ。

[1] 15

The Health, Labor and Welfare Ministry estimates that seven million elderly people aged 65 or older have been suffering from dementia since the latest survey.

[2] 16

No sooner had the Japanese government put together the new strategy on measures against dementia than Prime Minister Abe made an announcement at an international conference held in Tokyo.

[3] 17

The medicines for Alzheimer's disease available at present can only help hold back symptoms of the disease.

[4] 18

As of 2011, there were approximately 83,000 dementia patients who were treated at mental hospitals for longer than a year.

[5]

Specialists have long claimed that early-stage diagnosis and care of dementia patients can help them live with their families.

問 2 本文中の空欄(ア)～(ウ)に入る最も適切な語句を、①～⑤の中から一つ選び、その番号をマークせよ。(イ)は三カ所あるが、全て同じものが入る。

[1] 空欄(ア)

① being given ② gave ③ give ④ giving ⑤ was given

[2] 空欄(イ)

① calls for ② excludes ③ gives up ④ impairs ⑤ postpones

[3] 空欄(ウ)

① avoiding ② eliminating ③ falling victim to ④ reducing
⑤ taking place of

問 3 空欄(a)に入る最も適切な並び順のものを①～⑤の中から一つ選び、その番号をマークせよ。

- ① going away after wandering missing from their homes
- ② going missing after wandering away from their homes
- ③ going missing from wandering away after their homes
- ④ wandering after going away missing from their homes
- ⑤ wandering away from going missing after their homes

問 4 下線部(b) play up の意味に最も近い語を①～⑤の中から一つ選び、その番号をマークせよ。

- ① allot ② assume ③ change ④ emphasize ⑤ expand

問 5 下線部(1)～(3)の意味として最も適当なものを①～⑤の中から一つ選び、その番号をマークせよ。

[1] 下線部(1)

25

- ① 高齢になるにつれてより多くの人々に影響を与える傾向がある進行性の神経疾患である認知症は、脂質異常症や動脈硬化症のような生活習慣病と似た疾患であり、脳細胞の異常との関連性が指摘されてきたが、この疾患の治療法はまだ確立されていない。
- ② 多くの高齢者に影響を与える傾向のある進行性の神経疾患である認知症は、糖尿病や高尿酸血症のような生活習慣病だけでなく、脳細胞の異常とも関連付けられてきたが、この疾患の治療法はまだ確立されていない。
- ③ 進行性の神経疾患である認知症は高齢のより多くの人々に影響を与える傾向があり、脳細胞の異常や糖尿病、動脈硬化症のような生活習慣病と関連付けられてきたが、この疾患の治療法はまだ認可されていない。
- ④ 高齢になった時に人々がかかりやすい進行性の神経疾患である認知症は、糖尿病や高尿酸血症のような生活習慣病や脳細胞の異常と同列に扱われてきたが、この疾患の治療法はまだ確立されていない。
- ⑤ 高齢になるにつれてより多くの人々がかかりやすい進行性の神経疾患である認知症は、糖尿病や動脈硬化症のような生活習慣病と同様に、脳細胞の異常とも関連付けられてきたが、この疾患の治療法はまだ確立されていない。

[2] 下線部(2) 26

- ① 認知症を患う比較的高齢な人々を世話するために仕事を辞める人々の抱える問題は、数多くの若い世代の間でその症状が進行してきている問題とともに、盛んに取り沙汰されるようになってきている。
- ② 認知症を患っている高齢の近親者の世話をするために仕事を辞める人々がいるという問題は、それを発症する若い世代の数が増加しているという問題と並んで、表面化してきている。
- ③ 仕事を辞めた後に認知症を患った比較的高齢な人の面倒を見ている人々が数多く存在するという問題は、多くの若い世代がその症状を呈している事実とともに、盛んに取り沙汰されるようになってきている。
- ④ 認知症の症状が進行している若い世代の数の増加と共に、それを患う比較的高齢な人々を退職後に世話する人々の問題が盛んに取り沙汰されるようになってきている。
- ⑤ 認知症を患う高齢の近親者の世話をするために休職してしまう人々の問題が、その症状がみられる多くの若い世代の問題とともに、盛んに報道されるようになってきている。

[3] 下線部(3) 27

- ① ちょうど二ヶ月間で新たな戦略を練り上げるために、認知症患者とその家族が考えを明確に統一したのかどうかは明らかではない。
- ② それが明らかに認知症患者とその家族の意見かどうかは分からないが、新たな戦略を二ヶ月かけて作り上げるためには、十分議論する必要がある。
- ③ たった二ヶ月間で新たな戦略を作り上げる際、認知症患者とその家族に関する意見が十分に説得力を持つのかどうかは明らかではない。
- ④ 明らかに認知症患者とその家族の意見かどうかは分からないが、新たな戦略を二ヶ月かけて作り上げるために、それらの意見は十分宣伝されてきた。
- ⑤ たった二ヶ月間で新たな戦略を作り上げる際、認知症患者とその家族の意見が十分に調査されたのかどうかは明らかではない。

第3問 次の問い（問1～5）の英文中の空欄()～()に入る最も適当なものを①～⑤の中から一つ選び、その番号をマークせよ。

問1 It was only the day before yesterday that my parents () me about their plan to go to China.

- ① explained ② said ③ spoke ④ talked ⑤ told

問2 Curiously, the frog is well adapted () in very dry and cold conditions.

- ① for to live ② having lived ③ on living ④ to live
⑤ to living

問3 He had to choose between watching a live telecast of a soccer game and going on a date with Susan. He had never faced ().

- ① a such dilemma ② as such as dilemma ③ as such dilemma
④ such a dilemma ⑤ such as dilemma

問4 Further increase in the price of gasoline would discourage () his car.

- ① from driving ② him from driving ③ him to drive
④ in driving ⑤ to drive

問5 When I was in the bookstore, I noticed () a book off the shelf and hide it inside his business bag.

- ① a man take ② a man to take ③ taking a man
④ taking to a man ⑤ to take a man

第4問 次の問い（問1～5）の下線部①～④のうち、語法上誤りのある箇所を一つ選び、その番号をマークせよ。誤りがない場合は⑤をマークせよ。

問1

As ①soon as I know, this house has ②not been lived in ③by anyone ④for a long time.

問2

She is careful ①about her diet and ②makes sure to ③weight ④herself every morning.

問3

He had to change his diet and ①stop drinking to ②get his liver ③to function ④normally again.

問4

It is very important ①for you ②to keep all ③medicines out of ④hand of children.

問5

When it ①comes to ②explain ③physics, nobody ④can beat Mr. Johnson.

第5問 次の問い(問1~5)の日本語の文の意味に合うように []内の語句を並べかえて意味の通る英文を作り、空欄([38])~([47])に入る語句を一つ選び、その番号をマークせよ。

問1 オリバーはいつもは人当たりが良いので、彼が今朝出勤して来た時、誰にも挨拶をしなかったことを同僚たちは奇妙に思った。

Oliver is usually friendly, so his () () ([38]) () () he did not say hello to anyone when he ([39]) () the office this morning.

[① came ② co-workers ③ found ④ into ⑤ it ⑥ odd]
[⑦ that]

問2 顕微鏡のおかげで、科学者たちは16世紀以来、小さすぎて人間の目では見えない生命体や物質の構造について研究できるようになってきている。

Since the sixteenth century, () ([40]) () () study life forms and material structures () ([41]) () to see.

[① for ② has allowed ③ scientists ④ the human eye]
[⑤ the microscope ⑥ to ⑦ too small]

問3 ヨハン・セバスチャン・バッハは、バロック時代に成し遂げられた進歩の全てを一つの音楽体系に集大成したと一般的に考えられている。

Johann Sebastian Bach is generally () ([42]) () () () ([43]) () a single body of music.

[① all the advances ② as ③ considered]
[④ during the Baroque period ⑤ having amalgamated]
[⑥ into ⑦ made]

問 4 ファーストフード産業は、安価な食品を何百万人もの人々に迅速に提供しているが、この産業の成功の秘訣は、商品ではなくそのビジネスモデルにある。

The fast food industry quickly provides ()()(),
and the secret to the industry's success ()()()
()().

- [① but ② inexpensive food ③ in its business model
④ in its product ⑤ lies ⑥ millions of people ⑦ not
⑧ with]

問 5 磁性は普通の人には一般的に理解されていない現象かもしれないが、一方で、磁石はほとんどの人々にとってなじみがあるものである。

Magnetism may be a phenomenon that is ()()(),
()(), (), ()()() most people are familiar.

- [① are objects ② but ③ by the average person
④ generally understood ⑤ magnets ⑥ on the other hand
⑦ not ⑧ which ⑨ with]