

英 語

東北医科薬科大学医学部 2026 年度型 そっくり類題セット

※ これは東北医科薬科大学の入試問題ではありません。
2026 年度の出題形式（大問の数・設問の構成・解答形式）をもとに、
TMPS 医学館が題材や設定を変えて作成したオリジナル問題です。
英文中の人物・団体は架空です。

試験時間の目安：70 分

大問	ページ	時間配分の目安
第Ⅰ問（睡眠と記憶・長文15問）	2	20分
第Ⅱ問（偽レビューとAI・長文15問）	5	20分
第Ⅲ問（誤り指摘10問）	9	10分
第Ⅳ問（整序5問）	9	12分（見直し8分）

注意事項

- 問題は第Ⅰ問～第Ⅳ問の全4題。解答番号は本番と同じ 1～50（第Ⅳ問は各問の枠で囲まれた2つを答える）。
- 選択肢の番号は①，②，…の順に対応する。
- 解答・解説は、解説ページ（TMPS 医学館の過去問解説図書館）に掲載している。

第 I 問

次の英文を読み、空欄のある設問については、英文の内容に合うように①～④から最も適切なものを一つ選び問題文を完成させよ。質問形式の設問については、最も適切な答えを①～④の中から一つ選べ。[1]～[7] はパラグラフ（段落）の番号を表している。

- [1] The most obvious thing about a bad night's sleep is how tired you feel. Heavy eyes, a foggy head and a short temper make the next day painfully long. But those feelings distract from the real harm: a quiet attack on the memory system. The brain uses sleep to sort and store what it learned during the day. When sleep is cut short, much of that work is left undone. The resulting “memory gap” can leave students and workers unable to recall things they studied only hours earlier, researchers are finding. Missed details, forgotten names and slower learning are common side-effects.
- [2] That makes sleep loss “anything but a small problem,” says Dr. Hana Lindqvist. As a neuroscientist, she studies learning at Northgate University in Greenfield. Poor sleep lowers people's ability to take in new facts, she says. And that has big costs. Scientists now have a better picture of how the sleeping brain handles memories. They know which stage of sleep matters most and how much sleep is needed. Studies helped fill in the details. They came from experiments with lab mice and with volunteers who stayed in sleep labs. One experiment, in which volunteers learned lists of words, is summarized in Table 1.

Table 1 Recall test scores 24 hours after learning (out of 100)

Group	Sleep after learning	Score
A	8 hours	82
B	4 hours	61
C	none	44

Note: All groups took the same test. The groups were of similar age.

- [3] This new view may help explain why a steady bedtime seems to have far-reaching effects. A regular routine protects more than just good grades, says Prof. Tomas Brandt. He is a sleep scientist at Eastfield Medical Center in Canada. By giving the brain enough time each night, a steady routine may help keep forgetting at bay. During deep sleep, brain cells replay the events of the day. That replay helps turn fresh memories into lasting ones. Experiments on lab mice show that a region called the hippocampus holds new memories at first.
- [4] Inside the brain, the replay starts quickly. (①) Brain cells fire in the same order as they did while the person was awake. (②) The memory is then copied to the cortex, the outer layer of the brain. (③) Lindqvist's group traced how this happens by recording the activity of single cells in mice. (④) The researchers described their findings in the April 2022 issue of Night Science.
- [5] Too little sleep is not only a problem for students. In adults it can bring mistakes at work and car accidents. In rare cases, years of poor sleep may also be linked to serious illness. On their own, those are worrisome side-effects, says Dr. Alicia Moreno. She is the director of the Midlands Institute of Sleep Research in England. But memory loss also can leave people open to errors that a rested brain would normally ward off.
- [6] In 2019, Lindqvist and her colleagues had a chance to test the effects of sleep on school pupils.

These pupils belonged to a boarding school in the north. The school agreed to start its first lesson one hour later for a single term. As a result, pupils could sleep longer each morning. The old timetable had been used for decades, so it was just a matter of time before someone asked what a change would do. The researchers got permission from parents to give the pupils memory tests. They wanted to see how the pupils' scores changed once they could sleep longer. And they didn't have to wait long. The new timetable began just as the team finished the first round of testing.

- [7] The team had test scores from before and after the change for 120 pupils. Pupils who gained at least an hour of sleep scored higher on recall tests. The gain was largest for facts learned just before bedtime. That showed a clear link between sleep and memory, Lindqvist says. The team reported its findings on June 3, 2022 in Night Science.

問1 [1] According to paragraph [1], what is the real harm caused by a bad night's sleep?

- ① Heavy eyes and a foggy head.
- ② Damage to the memory system.
- ③ A short temper the next day.
- ④ Slower learning at school.

問2 [2] In paragraph [1], the phrase “memory gap” most closely refers to ().

- ① the brain growing new cells during sleep
- ② students feeling tired in class
- ③ the brain failing to store what it learned
- ④ a loss of hearing after a night without sleep

問3 [3] In paragraph [2], what does Dr. Lindqvist mean when she says sleep loss is “anything but a small problem”?

- ① Sleep loss is a serious problem.
- ② Sleep loss is easy to fix.
- ③ Sleep loss is a minor matter.
- ④ Sleep loss is a problem only for mice.

問4 [4] According to Dr. Lindqvist in paragraph [2], what effect does poor sleep have on people?

- ① It helps them take in new facts.
- ② It forces them to buy expensive equipment.
- ③ It makes their dreams more vivid.
- ④ It lowers their ability to take in new facts.

問5 [5] Which of the following statements is NOT true according to Table 1 and its note below paragraph [2]?

- ① Group A had the highest score.
- ② Scores fell as the hours of sleep fell.
- ③ Group C scored higher than 50.
- ④ Group B slept for four hours.

問6 [6] According to paragraph [3], one of the “far-reaching effects” of a steady bedtime is that it ().

- ① makes pupils sleep through lessons

- ② helps protect more than just good grades
- ③ causes brain cells to stop replaying events
- ④ shortens the time needed for deep sleep

問7 [7] In paragraph [3], the phrase “keep forgetting at bay” is closest in meaning to ().

- ① to make forgetting happen
- ② to hide forgetting from others
- ③ to pass forgetting on to friends
- ④ to hold forgetting back

問8 [8] According to paragraph [3], what happens during deep sleep?

- ① Brain cells stop all activity.
- ② Brain cells replay the events of the day.
- ③ The hippocampus grows larger.
- ④ New facts are quickly forgotten.

問9 [9] Where would the following sentence fit best in paragraph [4]? Choose (①), (②), (③) or (④).

From there, it can be kept for years.

問10 [10] Which of the following statements about what happens in the brain is NOT mentioned in paragraph [4]?

- ① Brain cells fire in the same order as when the person was awake.
- ② The memory is copied to the cortex.
- ③ The activity of single cells was recorded in mice.
- ④ The replay starts only after the person wakes up.

問11 [11] According to paragraph [5], which of the following statements is true about long-term lack of sleep?

- ① It usually ends within a week.
- ② It can lead to mistakes at work and car accidents.
- ③ It makes the brain stronger.
- ④ It is rare among adults.

問12 [12] In paragraph [5], the phrase “ward off” is closest in meaning to ().

- ① keep away
- ② invite
- ③ lose
- ④ give up

問13 [13] According to paragraph [6], why did Lindqvist’s team have a good opportunity to study the effects of sleep?

- ① Because no other school had ever changed its schedule.
- ② Because sleep problems were spreading across the country.
- ③ Because the school changed its timetable just as the first tests were finished.
- ④ Because parents wanted pupils to sleep less.

問14 [14] According to paragraph [6], what did the team plan to study in the pupils?

- ① Whether they liked the new lessons.
- ② How their test scores changed after they slept longer.
- ③ How fast schedules were changing across the country.
- ④ Why their parents had agreed to the change.

問15 [15] The following is a summary of paragraph [7]. Each of the blanks (1), (2), (3) and (4) corresponds to one of the options ①, ②, ③ or ④. Each option is used only once. Which option best fits blank (2)?

A school started its first lesson later, so pupils got more (1) each morning. The team compared test (2) from before and after the change. The (3) was largest for facts learned just before bedtime, which shows that sleep strengthens (4).

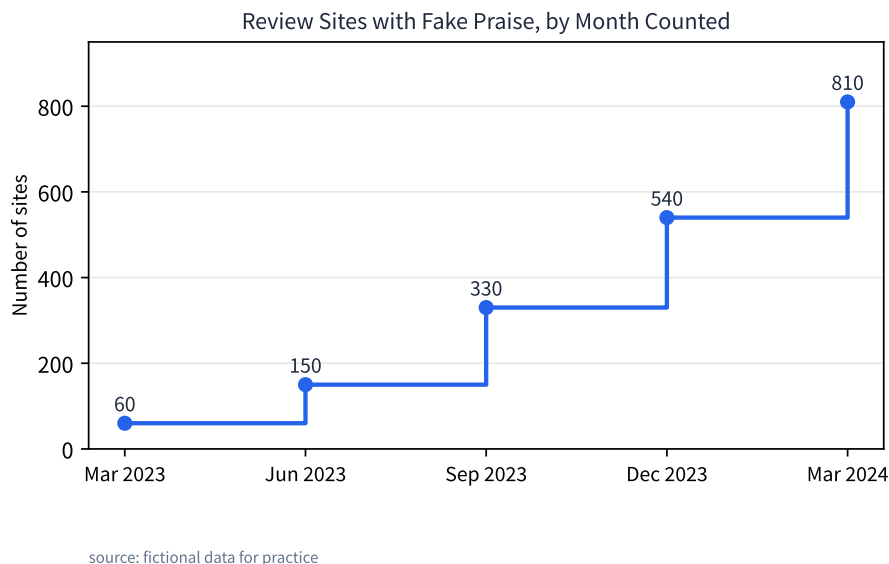
- ① memory ② scores ③ gain ④ sleep

第Ⅱ問 次の英文を読み、空欄のある設問については、英文の内容に合うように①～④から最も適切なものを一つ選び問題文を完成させよ。質問形式の設問については、最も適切な答えを①～④の中から一つ選べ。[1]～[8]はパラグラフ（段落）の番号を表している。

- [1] A restaurant had a perfect score on a popular review site last spring. Hundreds of diners wrote glowing words about its soup and its friendly staff. But the restaurant did not exist. Someone had used artificial intelligence, or AI, to write the reviews and to invent the place. Real travelers read the praise, and a few even drove across town to find it.
- [2] That scam is just one example of the wide range of false praise — including photos and videos — that almost anyone can now make with AI. Restaurants are not the only victims of such underhanded tricks. Last year, for example, a group of sellers posted thousands of five-star comments for a phone charger that caught fire. AI-written reviews can copy the voices of real customers. This type of content has been used to push up weak products. In May, a video of a well-known chef seemed to praise a kitchen knife that he had never used.
- [3] AI has also produced false information about health. In late 2024, a seller of herbal tea claimed there was research showing the tea could cure a cold in a day. The seller pointed to a study seemingly published in the Journal of Nutrition Facts. But an editor of that journal said the article did not exist. Apparently, someone used AI to make up a fake article that falsely appeared to come from the journal.
- [4] Many people use AI to lie, but AI can mislead by accident, too. One research team asked five AI models for advice on choosing a doctor. The answers were often wrong or out of date, the team reported in a 2024 paper for the Consumer Trust Project. Honest mistakes (misinformation) and deliberate lies (disinformation) have existed for years. But AI makes it easier, faster and cheaper to spread unreliable claims. And although some tools can spot or limit fakes, experts worry that the contest will become a cat-and-mouse game. AI will get better and better, and the people hunting fakes will struggle to catch up.
- [5] The stakes are high. With a flood of convincing fakes, it is hard to know whom to trust. (①) Writing a believable review used to take time and skill. (②) A buyer could often spot a

fake by its vague, repeated phrases. (③) Now almost anyone can create hundreds of lifelike reviews, sometimes within minutes. (④)

- [6] A team of consumer researchers recently showed just how easy this can be. Using a chat tool on a public AI platform, two team members wrote 240 hotel reviews in about an hour. The reviews contained more than 18,000 words of convincing praise for hotels that did not exist. “It was surprising how easily we could fool readers,” says Marta Keller. She is a consumer-law researcher — or “fraud detective” — at Lakeside University in Toronto. She and her colleagues shared these findings last September in a journal called *Market Review*.
- [7] Nobody needs to check every review before it appears, either. Websites can let thousands of comments through with little oversight. Many of these sites tell you little about who is behind them, says Daniel Okafor. He is an editor who follows online fraud at a watchdog group in Chicago. By March 2023, his group had counted 60 review sites full of fake praise. Within a year, that number had risen to more than 800. Many have honest-sounding names, such as Fair Stars or TrueTable. But their “reviews” may be made up.



This graph shows how many review sites a watchdog group found full of fake praise. The number rose from 60 in March 2023 to more than 800 by March 2024.

- [8] Detection tools work in different ways. Some look for unusual patterns in how a review is written, explains Ravi Desai. He is a graduate student studying computer science at Harborview University in Seattle. Others look at timing. When many reviews arrive at the same moment, a tool may mark them as suspicious. The tool then sends a warning to a human checker, who makes the final decision, Desai says.

問1 [16] Which of the following statements about the restaurant is NOT mentioned in paragraph [1]?

- ① It had a perfect score.
- ② Its owner won a prize for the soup.
- ③ Hundreds of diners wrote praise for it.
- ④ It did not exist.

問2 [17] According to paragraph [1], how did some travelers respond to the fake reviews?

- ① They reported the site to the police.
- ② They wrote fake reviews of their own.
- ③ Some drove across town to look for the restaurant.
- ④ They deleted their accounts.

問3 [18] In paragraph [2], the word “underhanded” is closest in meaning to ().

- ① secret
- ② dishonest
- ③ expensive
- ④ clever

問4 [19] In paragraph [2], which of the following is used as an example of fake endorsement?

- ① A chef writing a recipe book.
- ② A real customer posting a photo of a meal.
- ③ A shop owner thanking buyers politely.
- ④ A video of a chef praising a knife he never used.

問5 [20] According to paragraph [3], how was the study about the tea found to be fabricated?

- ① An editor of the journal confirmed that the article did not exist.
- ② A member of the tea company admitted the study was fake.
- ③ The tea company was found to have written the article itself.
- ④ An editor found the published study to be incorrect.

問6 [21] According to paragraph [3], which of the following statements is true?

- ① AI helped an editor check an article.
- ② A journal published an article that AI had corrected.
- ③ Someone used AI to make a fake article that seemed to come from a journal.
- ④ A seller asked a journal to print his study.

問7 [22] What does the research mentioned in paragraph [4] suggest about AI models?

- ① They can replace doctors.
- ② They always refuse to answer.
- ③ They give reliable advice.
- ④ They often gave wrong or out-of-date answers.

問8 [23] According to paragraph [4], what concerns do experts have regarding AI-generated fakes?

- ① Tools for detecting them may fall behind as AI improves.
- ② AI has made it harder to produce fakes.
- ③ There are no tools to detect them.
- ④ Using AI to spread lies is too costly.

問9 [24] In paragraph [4], the phrase “a cat-and-mouse game” is closest in meaning to ().

- ① a game for children
- ② a long contest in which each side keeps trying to outdo the other
- ③ a way to find fake reviews
- ④ a fight between two animals

問10 [25] Where would the following sentence fit best in paragraph [5]? Choose (①), (②), (

③) or (④).

Those clues are now much harder to find.

問11 [26] According to paragraph [6], what did the researchers discover in their experiment using the public AI platform?

- ① That AI tools cannot write convincing praise.
- ② How easy it is to produce convincing fake reviews.
- ③ That hotel reviews are always honest.
- ④ Why people trust real hotels.

問12 [27] In paragraph [6], the word “shared” is closest in meaning to ().

- ① announced
- ② divided
- ③ lent
- ④ cut off

問13 [28] According to paragraph [7], why is it difficult to distinguish unreliable review sites from real ones?

- ① They often clearly state who owns them.
- ② Many have names that sound honest.
- ③ Most publish only real events.
- ④ They are watched by the government.

問14 [29] According to paragraph [7] and the graph below it, which statement is true?

- ① The group had found exactly 500 such sites by December 2023.
- ② The group found more than 800 such sites by December 2023.
- ③ The number of such sites grew by more than 13 times in about a year.
- ④ The group had not yet found any such sites by March 2023.

問15 [30] The following is a summary of paragraph [8]. Each of the blanks (1), (2), (3) and (4) corresponds to one of the options ①, ②, ③ or ④. Each option is used only once. Which option best fits blank (4)?

Detection tools search for unusual (1) in the way reviews are written. When many reviews arrive at the same (2), the tool may mark them as suspicious and send a (3) to a human checker, who makes the final (4).

- ① decision ② time ③ patterns ④ warning

第III問

次の問1～10に示された英文は”Urban heat islands”と題する一続きの文章である。各問において、下線を付した語句①～④のうち、文法・語法上または文脈上の誤りを含むものを一つ選べ。

問1 [31] Urban heat islands ①refer to cities that ②are warmer than the countryside around them. This happens when natural land is replaced ③with buildings and roads ④that absorbing heat during the day.

問2 [32] ①On the other hand, a major consequence is ②that people who live in ③dense neighborhoods will ④face higher night-time temperatures.

問3 [33] ①Many people ②who works outdoors may feel that they ③get exhausted ④more quickly than in rural areas.

問4 [34] This effect is strongest at night. In the evening, ①concrete and asphalt ②slowly ③releases the heat ④they stored during the day.

問5 [35] ①For example, researcher Lena Brandt has measured the temperature in Greenfield ②since three years. She found that the city center was ③warmer than the suburbs ④by three degrees.

問6 [36] She also found that ①the more trees ②there were along a street, ③the cool ④the air felt.

問7 [37] Other solutions include ①painting roofs white, ②to plant gardens on rooftops, and ③building parks ④between crowded blocks.

問8 [38] In one town, planners ①are asked residents ②which streets ③felt the hottest. ④Based on the answers, they planted trees there.

問9 [39] However, trees alone cannot solve the problem. In dry areas, ①planting many trees ②may use up ③too many water ④that local farmers need.

問10 [40] Cities that invested in shade many years ago ①now enjoy ②lower summer energy bills, ③because they use ④fewer air conditioning.

第IV問

次の問1～5は一続きの文章である。それぞれの和文の意味に合うように [] 内の語句を並べ替えて英文を作り、空欄に入るものを一つ選べ。（空欄 41～50のうち、各問の枠で囲まれた2つを答える。）

問1 糖尿病は、血液中の糖が多すぎることによって起こる慢性の病気である。

Diabetes is a () () ([41]) () () ([42]) () () .

[①sugar ②the blood ③chronic ④in ⑤by ⑥caused ⑦too much ⑧disease]

問2 したがって、この薬を飲んでいる人は誰でも、数週間は運転を避けるべきである。

So anyone who () () ([43]) () () ([44]) () () () () .

[①avoid ②drug ③for ④is ⑤several ⑥should ⑦taking ⑧this ⑨weeks ⑩driving]

問3 2020年、ある患者が、以前に自分の画像を検査して小さな腫瘍を見つけたのに知らせなか

った診療所を訴える権利を勝ち取った。

In 2020, a patient won the right to sue the clinic that had earlier () () (45) () () (46) () () but had not told him.

[① tumor ② checked ③ found ④ small ⑤ his ⑥ scan ⑦ and ⑧ a]

問4 彼らが沈黙していたのは、データを共有しないでほしいという教授の依頼によるものだった。

Their silence was () () (47) () () (48) () () .

[① be shared ② request ③ that ④ due ⑤ the data ⑥ to ⑦ not ⑧ the professor's]

問5 医師は患者にどこまで伝えるべきか。「正直さ」に伴う義務について、私たちは何を学べるだろうか。

How much should a doctor tell a patient? What () () (49) () () (50) () () honesty?

[① that ② come ③ learn ④ the duties ⑤ about ⑥ with ⑦ we ⑧ can]

終