医学部医学科英語入試問題

下記の注意事項をよく読んで解答してください。

◎注意事項

1. 配付された問題冊子および解答用マークシート（受験番号のマークの仕方）に、それぞれ受験番号（4桁）ならびに氏名を記入し、解答用マークシートの受験番号欄に自分の受験番号を正しくマークしてください。

2. マークには必ずHBの鉛筆を使用し、濃く正しくマークしてください。

    記入マーク例：良い例  
                悪い例  

3. マークを訂正する場合は、消しゴムで完全に消してください。

4. 所定の記入欄以外には何も記入しないでください。

5. 解答用マークシートを折り曲げたり、汚したりしないでください。

6. 「止め」の合図があったら、問題冊子の上に解答用マークシートを重ねて置いてください。

受験番号  

氏名  

△M3(815-67)
次の英文を読み、後に続く質問1〜14にもっとも適する答えを選びなさい。

New forms of media have always caused moral panics: the printing press, newspapers, paperbacks and television were all once denounced as threats to their consumers' brainpower and moral fiber. So too with electronic technologies. PowerPoint, we're told, is reducing discourse to bullet points. Search engines lower our intelligence, encouraging us to skim on the surface of knowledge rather than dive to its depths. Twitter is shrinking our attention spans.

But such panics often fail basic reality checks. When comic books were accused of turning juveniles into delinquents in the 1950s, crime was falling to record lows, just as the denunciations of video games in the 1990s coincided with the great American crime decline. The decades of television, transistor radios and rock videos were also decades in which I.Q. scores rose continuously.

For a reality check today, take the state of science, which demands high levels of brainwork and is measured by clear benchmarks of discovery. These days scientists are never far from their e-mail, rarely touch paper and cannot lecture without PowerPoint. If electronic media were hazardous to intelligence, the quality of science would be plummeting. Yet discoveries are multiplying like fruit flies, and progress is dizzying. Other activities in the life of the mind, like philosophy, history and cultural criticism, are likewise flourishing, as anyone who has lost a morning of work to the Web site Arts & Letters Daily can attest.

Critics of new media sometimes use science itself to press their case, citing research that shows how "experience can change the brain." But cognitive neuroscientists roll their eyes at such talk. Yes, every time we learn a fact or skill the wiring of the brain changes; it's not as if the information is stored in the pancreas. But the existence of neural plasticity does not mean...
the brain is a blob of clay pounded into shape by experience.

Experience does not **revamp** the basic information-processing capacities of the brain. Speed-reading programs have long claimed to do just that, but the **verdict** was rendered by Woody Allen after he read “War and Peace” in one sitting: “It was about Russia.” Genuine multitasking, too, has been exposed as a myth, not just by laboratory studies but by the familiar sight of an S. U. V. undulating between lanes as the driver cuts deals on his cellphone.

Moreover, the effects of experience are highly **specific** to the experiences themselves. If you train people to do one thing (recognize shapes, solve math puzzles, find hidden words), they get better at doing that thing, but almost nothing else. Music doesn’t make you better at math, conjugating Latin doesn’t make you more logical, brain-training games don’t make you smarter. **Accomplished** people don’t bulk up their brains with intellectual calisthenics; they immerse themselves in their fields. Novelists read lots of novels, scientists read lots of science.

The new media have caught on for a reason. Knowledge is increasing exponentially; human brainpower and waking hours are not. Fortunately, the Internet and information technologies are helping us manage, search and retrieve our collective intellectual output at different scales, from Twitter and previews to e-books and online encyclopedias. Far from making us stupid, these technologies are the only things that will keep us smart.

1. The word “discourse” in line 4 is closest in meaning to
   a) technology
   b) presentation
   c) discussion
   d) intelligence
2. The word “coincided” in line 10 is closest in meaning to
   a) happened separately
   b) happened at the same time
   c) happened before
   d) happened after

3. The word “benchmarks” in line 15 is closest in meaning to
   a) standards by which things are judged
   b) movements to achieve more progress
   c) events that create new things
   d) successes in scientific achievement

4. The word “revamp” in line 29 is closest in meaning to
   a) change the order of
   b) downgrade
   c) process
   d) restructure

5. The word “verdict” in line 31 is closest in meaning to
   a) modification
   b) novel
   c) conclusion
   d) conflict

6. The word “specific” in line 35 is closest in meaning to
   a) difficult to learn from
   b) relating to a particular subject
   c) especially good at something
   d) going beyond the original purpose
7. The word “accomplished” in line 40 is closest in meaning to
   a) recommended
   b) ordinary
   c) intelligent
   d) talented

8. What is the purpose of this article?
   a) To give a warning about the dangers of using too many new technologies.
   b) To help us understand the problems of adopting new technologies before their effects are known.
   c) To make us want to use new technologies more.
   d) To counter arguments that new technologies are harmful to us.

9. According to the text, what is the main argument against the new electronic technologies?
   a) They require too much brainpower.
   b) They force us to go too deeply into subjects.
   c) They make us less intelligent.
   d) They have been denounced.

10. What example does the text give of a past panic?
    a) PowerPoint
    b) search engines
    c) IQ scores
    d) video games
11. What argument does the author make to show that the current panic might be false?
   a) Many scientists are making discoveries using old technology.
   b) Scientists are making new advancements despite using the new technologies.
   c) Scientists are more interested in art and culture than before.
   d) Crime is declining despite an increase in video games and other technologies.

12. According to the article, what is a common argument used by people who are critical of the new media technologies?
   a) That experience changes how the brain functions.
   b) That the claims made by speed-reading programs are false.
   c) That multitasking is really just a myth.
   d) Both b & c.

13. According to the article, in what ways does experience really change our brains?
   a) Experience can improve the way our brains work in general.
   b) Experience makes us more skilled only in the thing we are experiencing.
   c) Experience can make us better at many things beyond what we are trained in.
   d) Experience does not actually change how our brains function at all.

14. According to the article, why have the new technologies become popular?
   a) They help us deal with the greater amount of information that is available today.
   b) They help us to organize our information into bullet points.
   c) They help us to collect our information into one place.
   d) They help us to increase our knowledge exponentially in a shorter period of time.
About 20 million people were killed in the First World War, but many more died in a global epidemic during the last year of the war. We do not know exactly how many people died in the Spanish Flu epidemic of 1918, but estimates range from 50 to 100 million worldwide, making it the deadliest epidemic in world history.

The Spanish Flu came in three distinct waves that hit in quick succession in the span of one year. The first known cases occurred in military camps in the United States in March of 1918. The US was sending hundreds of thousands of soldiers to Europe to fight in the war, and this large movement of troops helped spread the disease. By May of 1918 the epidemic had spread to nearly every country in Europe, and by summer it had infected people in India, China, Russia, and Africa. The first country to publicly report about it was Spain, which is why it became known as the Spanish flu.

By July the epidemic seemed to be dying down, but it soon reappeared in a second wave. In August it hit cities in France, Africa, and the US almost simultaneously, and this new version was much worse. While the first wave of flu was very contagious, it did not kill many people. The second wave had a much higher mortality rate—about 20 times that of regular flu. Even more unusually, a high percentage of fatalities were healthy people between twenty and forty years old.

Those infected with the flu often died quickly. Soon after becoming infected, the victims would come down with fever, headache, and coughing. They would often turn blue from cyanosis as their blood became deprived of oxygen, and blood would come out of their noses and mouths. Victims would suffocate to death from the liquid in their breathing passages. Sometimes, the disease would progress so quickly that some people would be fine in the evening and dead by the next morning.
Doctors had no adequate way of treating the disease. Knowledge about influenza and viruses was still in its early stages, so medical research focused on simply trying to understand the disease and gathering data. Most treatments were concerned with alleviating the symptoms of the disease with pain medicines such as aspirin. Some attempts were made to create a vaccine, but these were unsuccessful.

Since medical science provided no cure, public health officials tried various measures to control the disease. Some cities required people to wear gauze masks and banned spitting in public. Stores were not allowed to hold sales, and schools were closed. These measures proved ineffective, though. In the US, over 200,000 people died of the flu in October alone. So many people died so quickly that medical and public services were overwhelmed. Mass graves had to be dug because of a lack of coffins and space to keep the bodies.

Like the second wave, the third wave occurred just as the epidemic seemed to be going away. When the war ended in November of 1918, people took to the streets in mass celebration. This, plus the thousands of soldiers returning home, allowed the flu to resurge. This third occurrence killed fewer people than the second wave, but more than the first. By the following spring it seemed to have finally ended.

Researchers are still studying the 1918 flu today. No one knows why this flu was so much worse than other outbreaks. Later epidemics, such as the swine flu of 2009, have been similar to the Spanish Flu, but not nearly so deadly. The worry still remains, though, that a similar catastrophic epidemic could happen again.

15. The word “succession” in line 6 is closest in meaning to
   a. relation
   b. sequence
   c. reaction
   d. deadliness
16. The word "contagious" in line 17 is closest in meaning to
   a. communicable but not fatal
   b. fatal but not communicable
   c. transmissible by contact
   d. responsible for a lot of suffering

17. The term "breathing passages" in line 25 refers to the
   a. trachea
   b. esophagus
   c. throat
   d. lungs

18. The word "alleviating" in line 31 is closest in meaning to
   a. removing
   b. curing
   c. condoning
   d. relieving

19. The word "overwhelmed" in line 39 is closest in meaning to
   a. barely adequate
   b. taking extraordinary measures
   c. unable to cope
   d. left in a state of panic

20. The word "resurge" in line 44 is closest in meaning to
   a. recombine with something else
   b. continue again after an interruption
   c. continue without stopping
   d. go away for a second time
21. The Spanish Flu was unusual because
   a. it came in three, quick waves.
   b. it was extremely deadly.
   c. it killed young, healthy people.
   d. all of the above.

22. The Spanish Flu spread quickly around the world because
   a. it was carried by many soldiers traveling to war.
   b. governments did not publicly report about it.
   c. it came in three waves.
   d. it hit many areas simultaneously.

23. Why was the epidemic called the Spanish Flu?
   a. It originated in Spain.
   b. More people died of it in Spain than in other countries.
   c. US soldiers first contracted it in Spain.
   d. It was first announced in Spain.

24. The second wave of the epidemic
   a. came several months after the end of the first wave.
   b. did not kill so many people.
   c. caused the most fatalities.
   d. started in Africa.

25. What was NOT mentioned as a symptom of the Spanish Flu?
   a. Blood emerging from the victims' mouths
   b. Blue skin color
   c. Headache and fever
   d. High blood pressure
26. People who caught the disease
   a. sometimes died within a day.
   b. were only in danger of dying if they were young.
   c. needed to drink lots of liquids.
   d. would die from blood in their lungs.

27. Medical researchers of the time
   a. did not understand anything about viruses.
   b. were just beginning to learn about viruses.
   c. believed that aspirin could cure the flu.
   d. were mainly concerned with preventing the disease.

28. Public efforts to fight the epidemic
   a. helped reduce the number of deaths.
   b. were effective once vaccines were developed.
   c. were inadequate.
   d. centered on digging mass graves.

29. The third wave of the epidemic
   a. was the deadliest of the three waves.
   b. was the least deadly of the three waves.
   c. was deadlier than the second wave but not as deadly as the first wave.
   d. was deadlier than the first wave but not as deadly as the second wave.

30. The Spanish Flu was significant because
   a. there remains the danger of a recurrence.
   b. later epidemics have not been as deadly.
   c. it was the first example of how to fight an epidemic.
   d. it showed how global the world had become.
31. Engineers have been working for years to perfect a car that runs on hydrogen other than conventional gasoline.

32. The new study reinforces the idea that is a strong link between exercise and insulin insensitivity.

33. According to the standard model, only four percent of our universe is make up of familiar components such as planets, stars, and gas.

34. Despite years of study, researchers still have only a vague understand of the phenomenon.

35. Along with a few accounts recorded hundreds of years after the event, we know practically nothing about the siege of Troy.
A store owner was tacking a sign above his door that read "Puppies for Sale." Signs like that have a way of attracting small children, and sure enough, a little boy appeared under the store owner's sign. "Okay," he asked.

The store owner replied, "Anywhere from $30 to $50."

The little boy reached in his pocket and pulled out some change. "I have $2.37," he said. "Can I please look at them?"

The store owner smiled and whistled and out of the kennel came Lady, who ran down the aisle of his store followed by five teeny, tiny balls of fur. One puppy was lagging considerably behind. Immediately the little boy singled out the lagging puppy and said, "What's wrong with that little dog?"

The store owner explained that the veterinarian had examined the little puppy and had discovered it didn't have a hip socket. It would always limp. It would always be lame. The little boy became excited. "Okay."

The store owner said, "No, you don't want to buy that little dog. If you really want him, I'll just give him to you."

The little boy got quite upset. He looked straight into the store owner's eyes, pointing his finger, and said, "I don't want you to give him to me. That little dog is worth every bit as much as all the other dogs and I'll pay full price. In fact, I'll give you $2.37 now, and 50 cents a month until.

The store owner, "You really don't want to buy this little dog. He is never going to be able to run and jump and play with you like the other puppies."

To this, the little boy reached down and rolled up his pant leg. He looked up at the store owner and softly replied, "Well, I don't run so well myself, and the little puppy will need someone who understands!"
36. Which of the following is the most appropriate for the underlined part 36?
   a. How much are you going to sell the puppies in?
   b. How much are you going to sell the puppies for?
   c. What are you going to sell the puppies of?
   d. What are you going to sell the puppies on?

37. What does word 37 mean?
   a. a little
   b. some
   c. a lot
   d. most

38. What does phrase 38 mean?
   a. felt sorry for
   b. cared for
   c. supported
   d. paid attention to

39. Which word is the best for blank 39?
   a. limping
   b. panting
   c. sniffing
   d. barking

40. Which of the following is the most appropriate for the underlined part 40?
   a. That is the puppy that I want to buy little
   b. That little is the puppy that I want to buy
   c. The puppy that I want to buy is that little
   d. That is the little puppy that I want to buy
41. Which word is the best for ①?
   a. pleased
   b. upset
   c. satisfied
   d. tolerant

42. Which of the following is the most appropriate for the underlined part ②?
   a. I have him pay
   b. I have him paid
   c. I have him pay for
   d. I have him paid for

43. Which word is the best for blank ③?
   a. agreed
   b. convinced
   c. countered
   d. expressed

44. Which of the following is the most appropriate for the underlined part ④?
   a. a badly twisted, crippled left leg to reveal a big metal brace supported by
   b. supported a badly twisted, crippled left leg by a big metal brace to reveal
   c. by a big metal brace to reveal a badly twisted, crippled left leg supported
   d. to reveal a badly twisted, crippled left leg supported by a big metal brace
45. What is the most important theme of this story?
   a. Empathy
   b. Friendship
   c. Compromise
   d. Justice
White rice joins the growing list of refined carbohydrates with links to increased risks for diabetes, according to a new large study that quantified (46) for consumers of white rice—as well as brown rice.

Turning brown rice white entails removing a rice grain's bran and germ, which uncovers the white endosperm. The process also raises the grain's glycemic index (a measure of a carbohydrate's ability to raise blood sugar) and strips away vitamins, fiber, magnesium and other components that might help keep diabetes at bay.

The new findings have key health implications because more than 70 percent of rice eaten in the U.S. is white rice, noted the authors of the new study, led by Qi Sun of the Department of Nutrition at the Harvard School of Public Health. The findings were published online June 14 in Archives of Internal Medicine.

(49) the reported health, dietary and lifestyle habits of 197,228 U.S. adults, the researchers found a striking difference in rates of type 2 diabetes between those who ate a lot of white rice and those who consumed (50) brown rice. Even after controlling for age, lifestyle, diet, ethnicity and other variables, the researchers still found a significant difference in risk.

Those who consumed at least five servings (150 grams each) of white rice per week had a 17 percent higher risk of getting type 2 diabetes than those who (51) ate any white rice at all. And people who were eating at least two servings of brown rice a week had an 11 percent lower chance of getting the disease than those who ate less than one serving of it a month. The authors calculated that (52) white with brown rice would lower the chances of type 2 diabetes by 16 percent.

Brown rice, however, did not appear to be the most effective whole grain for fending off diabetes. The researchers found that substituting about 50
grams of other whole grains (such as whole wheat or barley) for that much of (uncooked) white rice each day could reduce diabetes risk by as much as 36 percent.

Although rice currently makes up a small portion of most U.S. diets (generally less than two percent of total daily energy intake), in other parts of the world, such as Japan, rice can be responsible for nearly 30 percent of daily average energy intake, Sun and his colleagues noted. Nevertheless, the researchers concluded in their paper, “From a public health point of view, (55)” to help prevent type 2 diabetes.

46. Which word is most appropriate for blank 46?
   a. carbohydrates
   b. risks
   c. diabetes
   d. correlation

47. Which word can be substituted for word 47?
   a. requires
   b. shows
   c. encourages
   d. ensures

48. How can underlined part 48 be paraphrased?
   a. found
   b. cured
   c. going
   d. away
49. Which is most appropriate for blank 49?
   a. Assess
   b. To assess
   c. Assessing
   d. Assessed

50. Which word goes in blank 50?
   a. little
   b. less
   c. many
   d. more

51. Which is most appropriate for blank 51?
   a. more often than not
   b. hardly
   c. once in a while
   d. sometimes

52. Which is most appropriate for blank 52?
   a. will replace
   b. replaced
   c. replacing
   d. has replaced

53. How can underlined part 53 be paraphrased?
   a. protecting you from diabetes
   b. curing diabetes
   c. alienating you from diabetes
   d. suffering from diabetes
54. How can underlined part 54 be paraphrased?
   a. a little bit more
   b. a little bit less
   c. about the same amount
   d. a great deal

55. Which of the following is most appropriate for blank 55?
   a. replacing whole grains, including brown rice, by refined grains such as white rice, should be recommended
   b. replacing refined grains such as white rice by whole grains, including brown rice, should be recommended
   c. replacing brown rice, including whole grains, by refined, white rice, should be recommended
   d. replacing refined, white rice by brown rice, including whole grains, should be recommended
Arthritis is an inflammation of the joints (the junctures where the ends of two or more bones meet).

Inflammation (a. generates b. develops c. produces d. brings) in one of two ways. With osteoarthritis, there is gradual wearing away of cartilage in the joints. Healthy cartilage is the (a. changeable b. elastic c. rubberized d. flashy) tissue that lines and cushions the joints and allows bones to move smoothly against one another. When this cartilage (a. lessens b. shortens c. deteriorates d. advances), the bones rub together, causing pain and swelling. Permanent damage and stiffness of the joints are possible. (a. Because b. When c. If d. Although) osteoarthritis can result from direct injury to the joint, it commonly occurs in adults over the age of 55, because of long-term wear and tear on the joints.

Rheumatoid arthritis can attack at any age. This form of arthritis affects all the connective tissues in the body. The precise cause of rheumatoid arthritis is unknown. Some researchers believe that a virus (a. triggers b. leads c. brings d. involves) the disease, causing an autoimmune response whereby the body develops an allergy to its own tissues. However, evidence for this theory is inconclusive as yet. What is confirmed is the progression of the condition. First, the synovium (the thin membrane (a. to line b. lines c. lining d. lined) and lubricating the joint), becomes inflamed. The inflammation eventually destroys the cartilage. As scar tissue gradually replaces the damaged cartilage, the joint becomes misshapen and rigid.

(a. If leaves untreated b. If to leave untreated c. If leaving untreated d. If left untreated), rheumatoid arthritis may damage the heart, lungs, nerves, and eyes. Osteoarthritis can cause permanent damage and
stiffness of the joints.

Arthritis is not an inherited disease. 83(a. Therefore b. Furthermore c. Nonetheless d. Moreover), people who have a family history of arthritis are more likely to develop the disease. Women are at greater risk than men, although the reason for this is unclear. Excess body weight may promote osteoarthritis because of increased load on the joints. Constant sports- or job-related joint abuse may encourage arthritis, but inactivity can also cause the problem.

Symptoms of arthritis include swelling, tenderness, pain, stiffness, and redness in one or more joints. For many patients, pain is greatest in the morning and subsides 64(a. as b. because c. unless d. when) the day progresses. Damp weather and emotional stress do not cause arthritis, but they can make symptoms worse.

With rheumatoid arthritis, these symptoms may be accompanied by more generalized feelings of fatigue and fever. This form of arthritis may go into periods of remission, when symptoms disappear. When symptoms return, 65(a. so b. but c. as d. however), they are often more severe.
問66から問68は段落が組みかえられた一つの記事です。それぞれの間の文章を正しい順番に並べ替え。問69では問66から問68の段落を一つの話として成り立つように並べ替えなさい。

66.

a）Though the high-pitched squeal was a “poor imitation” of a baby, it was similar enough to attract curious adult tamarins feeding nearby, Rohe said.

b）But when the monkeys crept closer, they spotted the margay and escaped before the cat could attack.

c）Listed as near threatened by the International Union for Conservation of Nature (IUCN)

d）—meaning it’s likely to face a high risk of extinction in the near future—

e）the margay is a spotted cat that grows to about 7 pounds (3.3 kilograms) and typically feeds on small mammals, birds, and reptiles.

a）a—b—c—d—e　　b）a—d—c—e—b

c）a—c—b—e—d　　d）a—e—d—c—b

e）a—c—d—b—e
67.

a) Scientists in the Amazon rain forest's Reserva Florestal Adolpho Ducke, near Manaus, Brazil, heard a margay imitating the call of a baby pied tamarin monkey in 2005.

b) Rohe added that he's unaware of any other predators in the world using vocal mimicry as a hunting tool.

c) It was the first — and so far, only — scientifically documented case of a cat imitating a prey species in the Americas, team member Fabio Rohe, a researcher for the New York-based nonprofit WCS, said in an email.

d) The margay, or tree ocelot, mimics monkey calls to draw in prey, the nonprofit Wildlife Conservation Society (WCS) announced Thursday.

e) For a plucky little forest cat, the key to survival might just be "monkey see, monkey do."

a) a—b—c—d—e   b) b—e—a—c—d

a) c—b—a—e—d   b) d—e—a—b—c

a) e—d—a—c—b
68.

a) What's more, those repertoires may run in the family. Margay moms, Rohe said, likely pass the imitation strategy on to their young. In "wild cats, this learning with [the] mother seems to be essential for its survival."

b) And the margay probably isn't the only sneaky cat in the jungle.

c) Despite the margay's lack of success that day, the observation suggests the cats use surprising "psychological cunning" to nab their dinner, Rohe said.

d) Rohe and colleagues interviewed people living in the central Amazon who reported hearing other cat species—such as cougars and jaguars—tricking their prey through mimicry.

e) Many of the South America's prey species, such as macuco birds and agouti rodents make very sharp sounds that may be in the "potential repertoires" of cats, the researchers say.

\[
\begin{align*}
\text{a)} & \quad a-b-c-d-e & \text{b)} & \quad b-a-c-d-e \\
\text{c)} & \quad c-b-d-e-a & \text{d)} & \quad d-c-b-e-a \\
\text{e)} & \quad e-d-a-c-b.
\end{align*}
\]

69.

間66〜間68を一つの話として成り立つように並べ替えなさい。

\[
\begin{align*}
\text{a)} & \quad 66-67-68 & \text{b)} & \quad 66-68-67 & \text{c)} & \quad 67-68-66 \\
\text{d)} & \quad 67-66-68 & \text{e)} & \quad 68-67-66
\end{align*}
\]