

英 語

医学部医学科・応用生物学部共同獣医学科

問題冊子

注意事項

- (1) 試験開始の合図があるまで、問題冊子を開かないこと。
- (2) 問題冊子は23ページで、解答用紙は5枚である。問題冊子や解答用紙に、落丁、乱丁、印刷不鮮明のものがあつた場合は、ただちに試験監督者に申し出ること。
- (3) 受験番号は、5枚の解答用紙のそれぞれの指定箇所に丁寧に記入すること。
- (4) 問題は、 および の2つの大問よりなる。
- (5) 解答は解答用紙の指定箇所に丁寧に記入すること。
- (6) 解答用紙は、持ち帰らないこと。
- (7) 問題冊子は、持ち帰ること。
- (8) 各大問の満点に対する配点の比率(%)を次のとおりとする。
 は39%、 は61%
- (9) 設問は英文で書かれている。

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Part 1

Questions 1-8 :

Read the following text on The Dark Energy Survey and fill in the blanks (1)-(8) to complete the sentences. For each blank, you have four choices given below. Choose the correct word and write A, B, C, or D in boxes 1-8 on your answer sheet.

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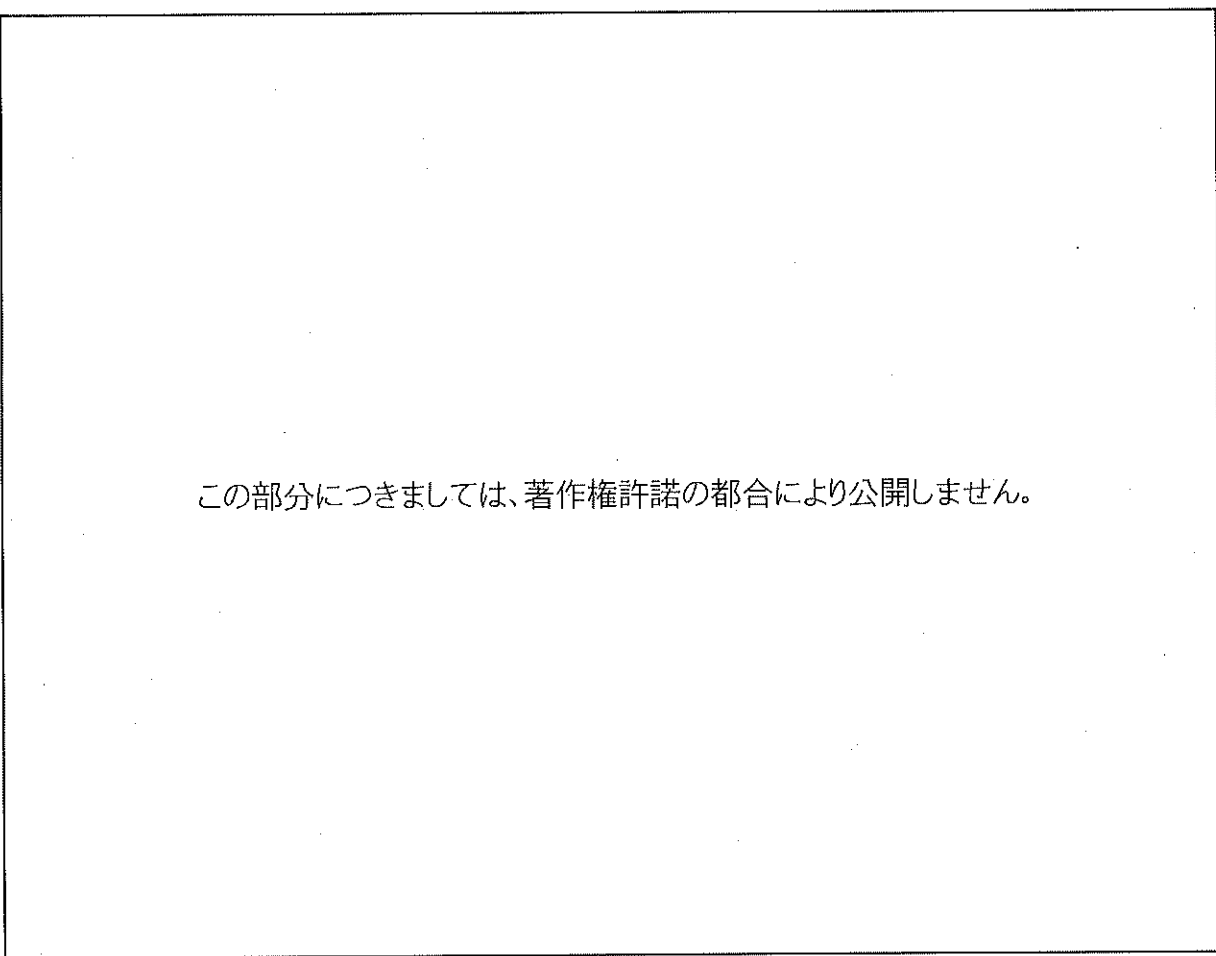
(Adapted from Davide Castelvecchi, "The Most Detailed 3D Map of the Universe Ever Made," *Nature*, May 28, 2021, <https://www.nature.com/articles/d41586-021-01466-1>)

- | | | | |
|-------------------|----------------|---------------|-----------------|
| (1) A. counted | B. covered | C. found | D. showed |
| (2) A. became | B. created | C. included | D. was |
| (3) A. acquaints | B. comments | C. discusses | D. presents |
| (4) A. colour | B. mass | C. shape | D. size |
| (5) A. by | B. for | C. into | D. to |
| (6) A. future | B. history | C. moment | D. present |
| (7) A. architects | B. biologists | C. chemists | D. cosmologists |
| (8) A. consists | B. constitutes | C. distresses | D. removes |

Part 2

Questions 9–15 :

Read the following text on the new science of sleep and choose from A–I the phrase which fits each blank (9)–(15). Write the correct letter in boxes 9–15 on your answer sheet. There are two extra phrases that are not used.



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(Adapted from Matthew Walker, "New Science of Sleep," *Science Focus*, July 2021, <https://www.sciencefocus.com/the-human-body/sleep>)

- A. 30 minutes of exercise
- B. Even the loss of a single hour of sleep
- C. Let's say
- D. Thankfully
- E. Try as you may
- F. you don't get enough
- G. you experience a dreamless sleep
- H. you will always carry that debt
- I. you will sleep more on those nights

Part 3

Questions 16–19 :

Combine three phrases from the table below to complete the conversation. Then, select the option from 1 to 8 that matches your answer, write the number.

Example:

Question 0.

Tyler : How was your weekend?

Sam : Great! I went to see a movie with my friend from high school.

Tyler : _____ 0 _____ ?

Sam : Yes, I did. It was very exciting!

(A) Did you	⇒	(A) like to see that movie	⇒	(A) that is coming out next week
(B) Would you		(B) see that movie		(B) that just came out

- | | | |
|--------------------|--------------------|--------------------|
| 1. (A) → (A) → (A) | 2. (A) → (A) → (B) | 3. (A) → (B) → (A) |
| 4. (A) → (B) → (B) | 5. (B) → (A) → (A) | 6. (B) → (A) → (B) |
| 7. (B) → (B) → (A) | 8. (B) → (B) → (B) | |

Answer:

The best combination is: (A) Did you ⇒ (B) see that movie ⇒ (B) that just came out

Therefore the answer is: 4. (A) → (B) → (B). So you write:

0
4

Question 16 :

John : Summer is coming, and we'd better prepare for it.

Mary : Yes, especially considering that we are having a baby soon.

John : What do you think about us staying at Tom's over the summer? He has a huge house.

Mary : That could be an idea. But isn't his house too old to stay in during such a humid season?

John : Well, _____ 16 _____.

Mary : I didn't know that. That makes me feel better.

(A) as far as I know,	⇒	(A) we've never had any trouble with	⇒	(A) purchasing a new air conditioner
(B) I don't want to brag but		(B) he has been talking about		(B) selling the house to his friend

- | | | |
|--------------------|--------------------|--------------------|
| 1. (A) → (A) → (A) | 2. (A) → (A) → (B) | 3. (A) → (B) → (A) |
| 4. (A) → (B) → (B) | 5. (B) → (A) → (A) | 6. (B) → (A) → (B) |
| 7. (B) → (B) → (A) | 8. (B) → (B) → (B) | |

Question 17 :

Ron : I hear the flu is spreading in our city.

Mike : It's pretty scary. Do you think we should get a flu shot?

Ron : Every doctor I consulted said we should absolutely get one.

Mike : Did they? How can they be so sure?

Ron : Look around and wake up! In our city, _____ 17 _____.

Mike : I see. I'm convinced now.

(A) the number of flu patients is declining	⇒	(A) in all	⇒	(A) and every clinic
(B) emergency rooms are packed		(B) by the day		(B) but two hospitals

- | | | |
|--------------------|--------------------|--------------------|
| 1. (A) → (A) → (A) | 2. (A) → (A) → (B) | 3. (A) → (B) → (A) |
| 4. (A) → (B) → (B) | 5. (B) → (A) → (A) | 6. (B) → (A) → (B) |
| 7. (B) → (B) → (A) | 8. (B) → (B) → (B) | |

Question 18 :

Luke : You said you want to be a firefighter in the future. Is there any specific reason for that?

Ken : When I was a child, my father and I were rescued when we had a car accident.

Luke : Wow, you have never told me that story.

Ken : I still vividly remember the man who never let go of my hand. Since then, my dream has been 18.

Luke : I hope you can fulfill your dream!

(A) to wear the same	⇒	(A) infamous as	⇒	(A) the man who saved me
(B) to become as		(B) uniform as		(B) my father recommended

- | | | |
|--------------------|--------------------|--------------------|
| 1. (A) → (A) → (A) | 2. (A) → (A) → (B) | 3. (A) → (B) → (A) |
| 4. (A) → (B) → (B) | 5. (B) → (A) → (A) | 6. (B) → (A) → (B) |
| 7. (B) → (B) → (A) | 8. (B) → (B) → (B) | |

Question 19 :

Keiko : Our English teacher is going to give us additional assignments soon.

Taro : Already? We just got a new one yesterday.

Keiko : I know. But, it's likely that there is 19.

Taro : Then it seems that the earlier we get started, the better.

Keiko : Yes, I couldn't agree more.

(A) more homework on the way	⇒	(A) and it won't take much	⇒	(A) with no time to study
(B) not much room left		(B) and it might cause delays		(B) to fall behind

- | | | |
|--------------------|--------------------|--------------------|
| 1. (A) → (A) → (A) | 2. (A) → (A) → (B) | 3. (A) → (B) → (A) |
| 4. (A) → (B) → (B) | 5. (B) → (A) → (A) | 6. (B) → (A) → (B) |
| 7. (B) → (B) → (A) | 8. (B) → (B) → (B) | |

Part 4

Questions 20-23 :

Read sentence A, then rearrange the words and phrases in the brackets in B to make a sentence with a similar meaning. In each question, there is ONE word or phrase which is not used. Then, in boxes 20-23 on your answer sheet, write the word or phrase that is not needed to complete the sentence.

Example:

0. A : Last night Peter declared his love for Emily.

B : Peter [that / very / Emily / told / loved / he / last night] her.

The completed sentence B is "Peter told Emily last night that he loved her," and the word "very" in the brackets is unnecessary. So you write:

0
very

Write ONLY the unnecessary word or phrase in the boxes on your answer sheet.

20. A : Tom decided that he would go anywhere but here.

B : Tom [other / was / from / go / anywhere / determined / to / than] here.

21. A : Mary's brother was going to succeed their father.

B : [over / sibling / after / was / to / take / from / Mary's / supposed] their father.

22. A : The professor said to Mr. Jones that he should allow his son to study abroad.

B : The professor [back / studying / his son / to / from / Mr. Jones / told / be / not / hold] abroad.

23. A : What brought John to such an awful idea?

B : [John / with / take / such / how / terrible / up / a / come / ended] idea?

Part 1

Questions 24-31 :

Read the following text and choose from A-I the phrase which fits each blank (24)-(31).
Write the correct letter in boxes 24-31 on your answer sheet. There is one extra
phrase that is not necessary.

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(Adapted from Erin Blakemore, "Was Cancer Really Less Likely in a Pre-industrial World?" *National Geographic*, May 2021, <https://www.nationalgeographic.com/history/article/cancer-less-likely-preindustrial-world>)

- A. visual assessments of skeletal remains
- B. looking at the bone's exterior surface
- C. since the study was conducted with specimens from a single geographic area
- D. seeing how cancer affected a pre-industrial society
- E. carcinogens such as tobacco or industrial pollutants
- F. due to significantly lower levels of environmental carcinogens
- G. facing the risk of cellular mutations by aging
- H. if Mitchell's assessment of the combined CT and X-ray evidence matched the opinion of Alastair Littlewood
- I. indoor pollutants spewed out by wood and coal fires

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Part 2

Questions 32-44 :

Read the following text and answer the questions that follow. Write the correct letter or number in boxes 32-44 on your answer sheet.

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(Adapted from Piyush Patel, "How Is an Unknown Virus or a Disease Named?," *Science ABC*, April 2021, <https://www.scienceabc.com/eyeopeners/how-is-an-unknown-virus-and-disease-named.html>)

Questions 32–35 :

From the introduction to the article, write the expressions that could be replaced with the words and phrases below. Each expression is made up of three words.

- 32. finally decided
- 33. got sick from
- 34. died
- 35. guidelines

Question 36 :

Why did the 1918 influenza pandemic become known as "the Spanish flu"?

- A. Because media at the time claimed that it had originated in Spain.
- B. Because more people died in Spain than in other countries.
- C. Because only Spain was openly publishing reliable medical data at the time.
- D. Because Spain had been a neutral country during the First World War.

Question 37 :

Which of these names is acceptable according to the WHO guidelines?

- A. Zika fever
- B. Ebola hemorrhagic fever
- C. AIDS
- D. Swine flu

Question 38 :

Who is responsible for suggesting names for new viruses and diseases?

- A. The WHO
- B. The ICTV
- C. The ICD
- D. The discoverers

Questions 39-43 :

Each of the following sentences expresses the main points of one paragraph. Write the number of the paragraph that each sentence best describes.

39. Although the names of some viruses might seem boring and ordinary, choosing them is a complicated process that requires careful consideration to avoid creating problems for specific groups, disputes between countries, and unnecessary alarm among the public.

40. Looking back through history, we can see many examples of diseases that have been named after the regions of the world in which they were believed to have originated.

41. It may seem natural to name a virus or a disease after a geographical location, but it can cause serious problems including bullying and discrimination for people who live there or have a connection to that place.

42. According to the WHO guidelines, new names must describe the main features of a disease, and it is also acceptable for the names to describe the nature of an illness as well as the part of the body that it affects.

43. If the virus that causes a new disease is already known and has previously been named, a reference to that virus should be incorporated into the name of the disease.

Question 44 :

Read the following three summaries of the text and select the appropriate option from the choices below.

Summary 1:

The naming of new viruses and diseases is complicated, and care should be taken not to disadvantage any group of people. The WHO has published recommendations for the creation of new names, but it is often the case that the public uses names for diseases and viruses that are different from the scientific terms. The WHO's recommendations include avoiding names that are based on geographical locations, names associated with specific groups, and names that reference a specific year.

Summary 2:

When a new virus or disease is discovered, it needs to be given a new name. Initially, a number of ideas are put forward, and the final name is decided by a group of experts. In the past, some diseases and viruses have been named after the place where they originated, a practice that has caused problems and disadvantaged many groups and communities. The WHO have said they believe that this practice should be abandoned, and they have published a list of rules for choosing appropriate names.

Summary 3:

In order to avoid stigmatizing groups of people, the WHO has published a set of proposals for the naming of diseases. These advocate a scientific description based on a physiological description of the disease and its symptoms. Anatomical references that describe the parts of the body affected are also acceptable. Unfortunately, it is often the case that inappropriate names find their way into general use before a formal name has been assigned.

- A. Only Summary 1 is correct.
- B. Only Summary 2 is correct.
- C. Only Summary 3 is correct.
- D. Only Summary 1 contains incorrect information.
- E. Only Summary 2 contains incorrect information.
- F. Only Summary 3 contains incorrect information.
- G. All of the summaries are correct.
- H. All of the summaries contain incorrect information.

The examination continues on the next page.

Part 3

Questions 45-54 :

Read the following text and answer the questions that follow. Write the correct letter (T, F, or N) in boxes 45-54 on your answer sheet.

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(Adapted from Stephan J. Guyenet, *The Hungry Brain*, Flatiron Books, 2017, 171-175)

Questions 45-54 :

Write T, F, or N for each of the following statements 45-54.

T = the statement agrees with the text

F = the statement does not agree with the text

N = the information is not given in the text

45. Experiments using identical and fraternal twins are beneficial for exploring the target genes which cause obesity.
46. Accumulation of fat in the abdominal cavity may increase the risk of obesity.
47. The goal of physiology is to explain the physical and chemical factors that are responsible for the origin, development, and progression of life.
48. One of the reasons that some people are intrinsically more resistant to gaining fat is the existence of involuntary movement.
49. The activation of leptin signaling pathways is known to induce an increase in food intake.
50. Children who have a genetic mutation-induced dysfunction of the melanocortin-4 receptor tend to be lean.
51. Different alleles of the same set of genes determine physical characteristics.
52. Each organ is a collection of many different cells held together by supporting structures.
53. Individual obesity can be explained by the genetic differences in blood.
54. Obesity is determined by the interaction of genetic and environmental factors.