

2022年度 入学試験問題(前期日程)

英 語

試験時間 120分

医学部：医学科

問題冊子 問題…… 1 ~ 5 ページ…… 1 ~ 15

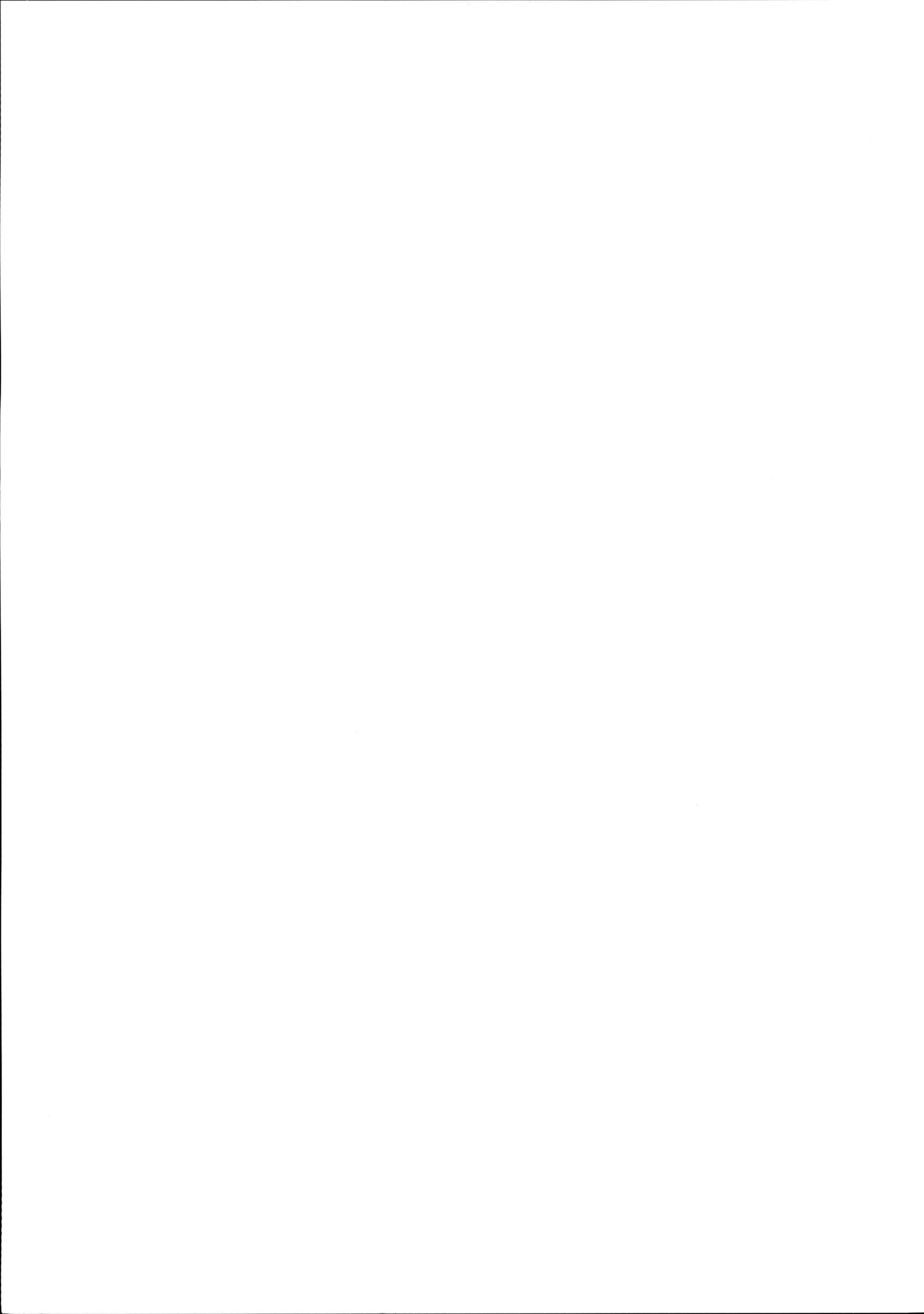
記述用解答用紙… 4枚

マークシート…… 1枚

配 点……表記のとおり

注 意 事 項

1. 試験開始の合図まで、この問題冊子を開かないこと。
2. 試験中に、問題冊子・解答用紙（記述用、マークシート）の印刷不鮮明、ページの落丁・乱丁及び下書用紙の不備等に気付いた場合は、手を挙げて監督者に知らせること。
3. 各記述用解答用紙の上に受験番号を記入する欄があります。試験の合図後、表紙と4枚の解答用紙すべてに受験番号を記入してください。また、マークシートの番号欄にも受験番号を右詰で記入し、該当番号をマークしてください。マークシートの「氏名（フリガナ）」欄にも記入してください。なお、記述用解答用紙、及びマークシートには、必要事項以外は記入しないこと。
4. 設問によって、記述用解答用紙に記入する場合とマークシートにマークする場合があります。解答は、必ず記述用解答用紙、及びマークシートの指定された箇所に記入、マークすること。
5. 記述用解答用紙の各ページは、切り離さないこと。
6. 配付された記述用解答用紙、マークシートは持ち帰らないこと。
7. 試験終了後、問題冊子は持ち帰ること。
8. 試験終了後、指示があるまでは退室しないこと。



1 次の英文を読んで、設問に答えなさい。(130点)

Humans clearly did not eat better after adopting agriculture. To make matters worse, diseases also increased and ran rampant<sup>(註)</sup> among early agricultural societies. Take dental cavities for example. In many agricultural societies, water is added to the staple grain, which is then cooked, much like rice or pasta, to become a soft cereal. A diet like that has a higher risk for dental cavities than does a diet with hard, rough foodstuffs, because the sticky starch<sup>(註)</sup> is more likely to remain on the teeth and provide nutrition to the bacteria that cause dental cavities. Nowadays, with advances in modern dentistry, we have no real concept of how serious dental cavities could be. In early societies before modern dentistry and dental hygiene practices, dental disease was devastatingly painful. If the infection spread, teeth would have been lost, and infection in the gums could have spread to the whole body and become fatal. And did I mention it was devastatingly painful?

Furthermore, a sedentary<sup>(註)</sup> life, one of the essential aspects of agriculture, leads to vulnerability to infectious diseases. As humans became bound to the land, they could not easily leave a place, even if a disease with a high mortality rate was spreading. Furthermore, living close to one another meant that once one person caught an infectious disease, it was likely only a matter of time before the whole village would become ill and the illness would spread to nearby villages. When humans were nomadic<sup>(註)</sup>, infectious diseases would be quickly left behind when we moved.

Community life had other implications for disease beyond simply rapid transmission. Pathogens<sup>(註)</sup> suddenly lived in a ( 1 ) environment where new hosts were supplied almost infinitely, house after house. The result was an evolutionary change in the pathogens themselves: they could ( 2 ) to be more virulent<sup>(註)</sup> and deadly. Before human societies became sedentary, virulence was not beneficial for pathogens. To ( 3 ) in a highly mobile human population, pathogens had to live with their hosts for a long time, to ensure that they wouldn't be ( 4 ) in a host body that suddenly died. Thus, pathogens carried by humans were evolutionarily ( 5 ) for weak virulence, and ( 6 ) humans survived for a relatively long time. But in this new, settled-society environment, when a host died, a new one nearby could ( 7 ) take its place, over and over again. It was not disadvantageous for pathogens to be strongly virulent; they could afford to kill their hosts.

Now consider the ( 8 ) of domesticated animals, which were likewise subject to this sedentary lifestyle. Diseases of animal ( 9 ) began to evolve trans-<sup>(註)</sup>species strains, also called "zoonoses," that could jump to human hosts. Humans soon were becoming ( 10 ) from attacks by a new breed of frightening diseases.

Judging from the narrative up until now, we might expect a substantial decrease in population to have accompanied the beginning of agriculture. But a strange thing happened: human populations increased, almost explosively.

Even more surprisingly, (decrease, was, in, this, increase, due, mortality, a, not, to).  
(A) Mortality actually increased with the rise of agriculture because of the increase in mortality-contributing factors, such as infectious diseases. The population explosion was not due to a decrease in deaths, but rather to a large increase in births. In other words, fertility far surpassed mortality. And we have agriculture to thank for that.

As fertility increased substantially, the population grew rapidly. In evolutionary biology, population increase in a species is a mark of its successful biological adaptation. Clearly, this success was thanks to a sedentary lifestyle, agriculture, and cooking.

Does our population explosion show that agriculture was ultimately an unmitigated<sup>(注)</sup> successful evolutionary adaptation? Not quite. Rapidly increasing populations led to yet another tragedy. More ( [21] ) became necessary to feed larger populations. As a result, humans started to engage in small—and then large-scale wars to take ( [22] ) of more land. Wars increased mortality. As mortality increased, there were fewer and fewer people to send off to war *and* also work the land. The need for more children continued to ( [23] ). Now, women's ( [24] ) consisted of having to have another baby while an older baby was still very young, all while working hard to plow<sup>(注)</sup> the land.

As population and ( [25] ) increased, surplus was generated. ( [26] ) arose in which a segment of people controlled the distribution of surplus, and the distribution power was inherited through ( [27] ) lines. Agricultural society became stratified<sup>(注)</sup> with a highly ( [28] ) and detailed social class. Cities, ( [29] ), and civilization developed. But we still have this question: With agriculture, did we step closer to prosperity or farther away? The late George Armelagos, an anthropologist at Emory University, is famous for asking this question. And the quote often attributed to him—"Agriculture is the biggest mistake in human history"—probably has some ( [30] ).

(Sang-Hee Lee, *Close Encounters With Humankind*, 2018 より, 出題の都合上一部改変)

- (注) rampant : 猛威をふるう      starch : でんぷんを多く含んだ料理  
sedentary : 移住しない      nomadic : 遊牧民の      pathogen : 病原菌, 病原体  
virulent : 毒性の強い      trans- : 越えて, 他の側へ, 別の状態へ  
unmitigated : 真の, 純然たる      plow : すきで耕す      stratified : 層化した

設問 1. 本文中の( 1 )～( 10 )にあてはまるものとして最も適切なものを①～⑩から選び、マークしなさい。ただし重複はしない。なお、⑩を選ぶ場合には⑩をマークすること。

- ① selected      ② addition      ③ afford      ④ rich      ⑤ survive  
⑥ infected      ⑦ ill      ⑧ trapped      ⑨ origin      ⑩ immediately

設問 2. 本文の内容を踏まえ、以下の質問に英語の文で答えなさい。解答は記述用の用紙に記載すること。

1. What are three disadvantages connected with the human adoption of agriculture that the author points out? Write your answers in complete sentences of more than 25 words.
2. According to the information contained in this article, what are two advantages regarding infectious disease that a nomadic life gave to humans? Write your answers in complete sentences of more than 25 words.
3. What were two advantages of the change from a nomadic to an agricultural lifestyle that are noted in the article above? Write your answers in complete sentences of more than 25 words.

設問 3. 本文に基づき、次の1～10の内容について、①～③の中で該当するものを選び、マークしなさい。

- ① 本文で述べられている内容と一致している。
- ② 本文で述べられている内容と一致していない。
- ③ 本文で述べられている内容では判断できない。

- 11 1. Pre-agricultural diets were better for human health than diets of groups which developed agriculture.
- 12 2. In these modern times we can easily understand the extent to which dental cavities affected early agricultural societies.
- 13 3. Early agricultural societies supplemented their starchy diets with hard and rough foodstuffs.
- 14 4. Infection from dental cavities often caused loss of teeth but rarely caused fatalities after humans adopted agriculture.
- 15 5. While humans were nomadic, their animals were sedentary.
- 16 6. 'Zoonoses' not only jumped to humans but were transferred to domestic animals as well.
- 17 7. Virulence is always beneficial for pathogens in connection with humans.
- 18 8. In environments where humans were sedentary, pathogens could not afford to be strongly virulent.
- 19 9. Though mortality increased with the coming of agriculture, there were more and more people to send off to war in addition to working the land because of the population explosion.
- 20 10. Egypt is an example of an ancient culture that was stratified and had a highly complex and detailed social class.

設問 4. 本文の内容を踏まえ、下線部(A)が最も適切な意味になるように( )内の単語を並べ替えなさい。解答は記述用の用紙に記載すること。

設問 5. 本文中の( 21 )～( 30 )にあてはまるものとして最も適切なものを①～⑩から選び、マークしなさい。ただし重複はしない。なお、⑩を選ぶ場合には⑩をマークすること。

- ① control      ② family      ③ farmland      ④ nation-states  
⑤ merit      ⑥ divisions      ⑦ lives      ⑧ productivity  
⑨ rise      ⑩ complex

2 次の英文を読んで設問に答えなさい。(60点)

Cosmetic surgery, also <sup>(A)</sup> know as “plastic” surgery, is the science of changing the way a person looks by reshaping a part of the body. Cosmetic surgery ( [31] ) includes replacing the skin of people who have been burned and replacing the hair that some people lose as they grow older. The science of beauty has changed with time, but the desire for beauty ( [32] ) the same. This chapter will discuss how fashions have changed and how these changes have led to the new modern age of cosmetic surgery.

People have always had the desire to look more beautiful and fashionable. Whatever their age, size, or shape, people have followed fashion in order to look more attractive. In the 1800s, for example, American women in New York began to admire the fashions of Paris.

In fact, French fashions were once so popular that American dressmakers used to change <sup>(B)</sup> their names to French ones!

In the 1700s, ( C ). During the time of the French Revolution, many women used to wear corsets, belts that made their waists appear much slimmer. Today we still think of the ideal person as tall and slim. But, nowadays, men or women who want to change their body shapes don't need to wear uncomfortable clothing. ( [33] ), they can choose cosmetic surgery to reshape their bodies or to remove body fat.

In England in the 1500s, makeup became an important part of beauty. Some women used to paint their faces white. They thought this made them more attractive. Later, in North America, some women used to eat arsenic, a dangerous poison, to make their faces whiter. By the 1860s, American women started using makeup to make themselves more attractive. These days, women who want to look their best at all times have started using ( [34] ) makeup. Some men, especially those in show business, also use ( [34] ) makeup. The application of ( [34] ) makeup is a type of cosmetic surgery. It is much safer than using paint and arsenic, and it helps busy people save time.

In the 1890s, Americans discovered that bicycle riding could actually improve their appearance! They exercised in order to look and feel better. The popularity of bicycle riding even led to a change in fashion. American women began to wear shorter skirts instead of the traditional long, full ones they used to wear. By the 1920s, the beauty ideal was closely related to health, and people believed that diet and exercise were the best ways to become naturally beautiful.

Although diet and exercise are still popular ways of improving one's appearance, there are some parts of the body that cannot change without the help of a cosmetic surgeon. In the past, American women used to spend weeks <sup>(D)</sup> repeat words that started with the letter “p”



because they wanted to change the shape of their mouths. Today, a cosmetic surgeon can reshape the nose or lips in a few hours. Rhinoplasty, the reshaping of the nose, can greatly improve a person's appearance. People who cannot lose weight in certain areas of their bodies through diet and exercise can use liposuction, the surgical removal of body fat, to make their bodies slimmer.

Surprisingly, cosmetic surgery has been used for centuries in China and India. Today cosmetic surgery is used in many countries to improve the appearance of people who have been hurt in fires or in car accidents. Cosmetic surgery is also used to improve the appearance of children who are born with physical problems.

Is it possible that in the future everyone will look more beautiful? The answer could be yes. ① Cosmetic surgeons are working hard to find safer and faster ways to help people who want to change the way they look. ② With the help of computers, people can see their new faces before the surgery is even done. ③ With lasers (machines that produce very strong light) cosmetic surgery can be done faster than ever before. ④ However, like any form of surgery, cosmetic surgery can be dangerous and painful. ⑤ It is also somewhat expensive for the average person. ⑥ People appreciate feeling dangerous and painful because it is expensive. For these reasons, cosmetic surgery is not ( K ) popular today ( K ) it could be in the future. As surgeons find safer, faster, and less expensive techniques, people around the world will continue their search for beauty.

(Laurie Betta and Carolyn DuPaquier Sardinas, *NorthStar: Focus on Reading and Writing, Intermediate*, 1998 より, 出題の都合上一部改変)

設問 1. 本文中の( 31 )～( 34 )にあてはまるものとして最も適切なものを①～⑤から選び、マークしなさい。

( 31 )

- ① still                      ② but                      ③ yet                      ④ nevertheless  
⑤ also

( 32 )

- ① provokes                  ② soars                      ③ roars                      ④ remains  
⑤ roams

( 33 )

- ① Likewise                  ② Instead                      ③ Hence                      ④ Thereby  
⑤ Otherwise

( 34 )

- ① permanent                  ② crucial                      ③ innate                      ④ stern  
⑤ outstanding

設問 2. 下線部(A)を正しい形に変えなさい。解答は記述用の用紙に記載すること。

設問 3. 下線部(B)を和訳しなさい。解答は記述用の用紙に記載すること。

設問 4. 35 ( C )に入る最も適切な表現を①～④から選び、マークしなさい。

- ① in Western societies, cosmetic surgery became increasingly popular  
② in France, there was a revolution in male beauty  
③ height and weight became an important part of beauty  
④ for women, makeup was considered to be important

設問 5. 下線部(D)を正しい形に変えなさい。解答は記述用の用紙に記載すること。

設問 6. 36 下線部①～⑥には、本文の内容から考えてふさわしくない文が1つ含まれている。それに該当する文を選び、番号をマークしなさい。

設問 7. ( K )に共通して入る1語を答えなさい。解答は記述用の用紙に記載すること。

設問 8. 本文に基づき、次の1～7の内容について、①～③の中で該当するものを選び、マークしなさい。

- ① 本文で述べられている内容と一致している。
- ② 本文で述べられている内容と一致していない。
- ③ 本文で述べられている内容では判断できない。

- 37 1. The father of plastic surgery is considered to have been Sir Harold Gillies.
- 38 2. Women put on makeup from the 1500s because it helped them to be charming.
- 39 3. Women put on makeup from the 1500s in order to avoid arsenic.
- 40 4. Women put on makeup from the 1500s in order to save money and time.
- 41 5. The most significant improvements in the history of plastic surgery occurred during the world wars.
- 42 6. Today cosmetic surgery is used to help those who have been hurt in car accidents.
- 43 7. Today cosmetic surgery is used to help children who have physical issues from birth.

3 次の1～10の文中の( )に入れる最も適当なものを①～⑤から選び、マークしなさい。  
(30点)

- 44 1. Children are taught ( ) strangers.  
① don't trust                      ② don't have to trust                      ③ not trust  
④ not to trust                      ⑤ do not to trust
- 45 2. Sophia sat ( ) out the window for a long time before she said, "We can talk about it."  
① to catch a glimpse of                      ② to perceive                      ③ to probe  
④ discerning                      ⑤ gazing
- 46 3. The boys ( ) the girl about her hair.  
① betrayed                      ② gripped                      ③ teased  
④ crawled                      ⑤ stumbled
- 47 4. She ( ) hardly arrived at the house when it began to rain.  
① did not                      ② have not                      ③ does not  
④ had                      ⑤ had not
- 48 5. Chapter one ( ) the role of sleep in the growth of a child.  
① outlines                      ② consents                      ③ assigns  
④ launches                      ⑤ outstands
- 49 6. In the U.S. presidential election, some took advantage of early voting; ( ) chose to wait until Election Day.  
① the other                      ② anothers                      ③ the another  
④ other                      ⑤ others
- 50 7. The girls ( ) from his expression that he was angry.  
① ascribed                      ② attributed                      ③ inferred  
④ impaired                      ⑤ abode
- 51 8. There are a few broken windows in the house, and the walls need ( ).  
① repaired                      ② repairing                      ③ to repair  
④ be repair                      ⑤ been repaired
- 52 9. Fearing the flooding risk, the mayor ordered the ( ) of people living in the city.  
① hygiene                      ② evacuation                      ③ utility  
④ appliance                      ⑤ hazard
- 53 10. The ( ) thing about yesterday was that it seemed unusually still and quiet.  
① peculiar                      ② silly                      ③ ethical  
④ drastic                      ⑤ chronic

4

次の1～5が適切な意味になるように( )内の単語を正しく並べかえなさい。ただし、文頭に来るものも小文字で示している。なお、解答は記述用の解答用紙に記載すること。(20点)

1. (occurred, he, me, that, it, was, never, to) pretending to be ill.
2. You (it, have, is, matter, left, the, should, as).
3. She (to, from, something, listening, learn, important, used, very) to the radio.
4. There are (reading, over, books, again, over, worth, many, and).
5. He was standing right in the (eyes, room, closed, the, with, middle, his, of).

5 次の英文を読んで、設問に答えなさい。(60点)

The concept of animal adolescence may surprise you, as it did me. Of course, we have all seen gangly<sup>(注)</sup> young dogs just ( [64] ) of puppyhood who have not quite matched their oversized feet to their less-advanced motor skills. But the drama, awkwardness, and dangers of teen life seems unique to our species. And, indeed, it probably is one of a kind, if you associate adolescence ( [65] ) teenagers' unmatched ability to wound their parents with a strategic eye-roll. But while the details may differ, a larger truth ties human teens to the vast majority of other species. They all must pass through a difficult transition: the period between leaving the care of adults and becoming adults themselves.

We often call adolescence the teenage years, for the obvious reason that the transition roughly corresponds with that segment of a human life span. In other animals, the gradual shift ( [66] ) child to adult can last anywhere from about a week for a fly to fifteen years for an elephant. For zebra finches<sup>(注)</sup>, it lasts about two months, starting forty days after they hatch. In monkeys, the journey from their mother's side to motherhood (or fatherhood) happens ( [67] ) four years. Even primitive, single-celled paramecia<sup>(注)</sup> have an adolescent phase—very short—fifteen to twenty-four hours in which their cell nucleus and cytoplasm<sup>(注)</sup> change as well as, believe or not, their behavior.

We human doctors have dealt with the unique and worrying trials of this period the same way we have with especially complicated organs or disease—( [68] ) creating a new specialty. “Adolescent medicine” caters<sup>(注)</sup> to an in-between population: patients who have outgrown their pediatricians<sup>(注)</sup> but are not quite ready ( [69] ) an internist<sup>(注)</sup>. It addresses the hormonal shifts of adolescence and the physical challenges of emerging sexuality. Doctors in this nascent<sup>(注)</sup> field work carefully to prevent a frightening list of threats from happening to young humans: traffic accidents, STDs<sup>(注)</sup>, alcohol and drug abuse, traumatic injury, teen pregnancy, and suicide. Much of what we associate with adolescence involves behavioral changes, and lately research has focused on brain changes that help explain those behaviors—( [70] ) risk taking, sensation seeking, and the somewhat puzzling compulsion to fit in with a group.

Of course, all animals have different things to learn while traversing the process that takes them from sexually immature, vulnerable child ( [71] ) reproductively capable, developed adult. In our case, those include advanced language skills and critical thinking. But there is one feature that defines adolescence in species from condors to capuchin monkeys<sup>(注)</sup> to college freshmen. It is a time when they learn by taking risks and sometimes making mistakes.

A surprising and sad fact of life is that just being a human teenager—especially a boy—is very risky, and often deadly. In the United States, once children have survived infancy and early toddlerhood<sup>(註)</sup>, most will enjoy a brief period ( [ 72 ] ) relative safety, until they hit age thirteen. At that moment, however, the death risk climbs abruptly, mostly because of traumatic injury. The Centers for Disease Control and Prevention (CDC) reports that “among teenagers 12-19, death rates increase with every year of age. This pattern is stronger for males.” At ( [ 73 ] ) age twenty-five, rates of fatal injuries seen so commonly in adolescents taper off<sup>(註)</sup>. In adult years, cancer, heart problems, and other long-term diseases emerge as the main health risks.

These statistics parallel death trends in the animal world. “Young animals suffer higher rates of predator-induced mortality than adults,” according to Tim Caro, a biologist and author of *Antipredator Defenses in Birds and Mammals*. Risk tapers off as the infant survives early challenges. But as animals’ bodies grow in anticipation of transition, so do the dangers. Consider an adolescent warthog<sup>(註)</sup> searching for food for the first time without the protection of his mother. Because he lacks his full set of defensive horns and thick hair and does not yet have the adult stamina to outrun a predator, his odds of survival would be low if a cheetah came upon him. Since they cannot run as fast, fly as high, or otherwise manage threats as skillfully as adults, young animals fall to predators more often. Less experienced, they misjudge situations and blunder into<sup>(註)</sup> danger.

Of course, on the whole, modern human teens are not being picked off by lions or the other hungry predators that threatened our distant ancestors. What kills adolescents in many countries around the world is a different lethal<sup>(註)</sup> presence: motor vehicles. The CDC reports that 35 percent of deaths in the twelve-to-nineteen age group in the United States come from traffic accidents.

Other sudden, violent causes of death threaten teens, too. According to the World Health Organization, interpersonal violence takes the lives of hundreds of ten- to twenty-four-year-olds every day. And gun accidents, suicides, murders, drownings, burns, falls, and warfare are also leading killers of adolescent humans worldwide.

Adults recognize this behavior so well that it is enshrined<sup>(註)</sup> in both law and supposedly forward-thinking parenting strategies. It is why it is harder to rent a car before you are twenty-five and why auto insurance rates are highest for adolescents. Why we set drinking ages and driving ages. Some states and towns dictate how many teens can be in a car at one time. New Jersey forbids all teens, not just the driver, to use electronic devices. And a scarlet symbol must be exhibited on their license plates, marking them as younger drivers.

Some parents prefer to take safety into their own hands, setting curfews<sup>(註)</sup> and stocking

living rooms with attractive items for teens — gaming consoles, junk food, even alcohol. “If he is going to drink, I would rather he do it safely in his own home,” the thinking goes.

(Barbara Natterson Horowitz and Kathryn Bowers, *ZOOBIQUITY: What animals can teach us about being human*, 2012 より, 出題の都合上一部改変)

- (注) gangly : ひょろっとした      zebra finches : キンカチョウ(鳥)  
paramecia : ゾウリムシ      cytoplasm : 細胞質      cater : ~に応じる  
pediatricians : 小児科医      internist : 内科医      nascent : 発生期の  
STDs : 性感染症      capuchin monkey : オマキザル      toddlerhood : 幼児期  
taper off : 次第に減る      warthog : イボイノシシ  
blunder into : うっかり入り込む      lethal : 死をもたらす      enshrine : 制定する  
curfews : 外出禁止令

設問 1. 本文に基づき, 次の 1 ~ 10 の内容について, ①~③の中で該当するものを選び, マークしなさい。

- ① 本文で述べられている内容と一致している。  
② 本文で述べられている内容と一致していない。  
③ 本文で述べられている内容では判断できない。

- 54 1. 犬は子犬の頃から運動能力に優れている。  
55 2. 人間で青年期の年齢は概ね 10 代に一致する。  
56 3. 青年期の患者は, 病院では内科を受診する。  
57 4. 成人では, 癌や心臓病などが健康を脅かす主なリスクとなる。  
58 5. 青年期には危険を冒し, 過ちを繰り返しながら学ぶ。  
59 6. 幼児期には女児の死亡率が高い。  
60 7. アメリカでは, 13 歳になると男児が主に病気で亡くなる例が増える。  
61 8. 若者の死亡原因では暴力が原因の場合も多い。  
62 9. 動物では若い個体は, 成長した個体より補食者に襲われやすい。  
63 10. 若い動物では経験がなくても, 危険を避ける能力が高い。



設問 2. 本文中の( 64 )～( 73 )にあてはまるものとして最も適切なものを①～⑩から選び、マークしなさい。ただし重複はしない。なお、⑩を選ぶ場合には⑩をマークすること。

- ① of            ② about            ③ from            ④ like            ⑤ out  
⑥ with            ⑦ by            ⑧ for            ⑨ over            ⑩ to

設問 3. 下線部(A)を日本語に訳しなさい。なお、解答は記述用の解答用紙に記載すること。

以下白紙



