

# 獨協医科大学 医学部

平成21年度 入学者選抜試験問題

一般入学試験

## 英 語 (70分)

### I 注意事項

- 1 試験開始の合図があるまで、この問題冊子の中を見てはいけません。
- 2 この問題冊子は19ページあります。ただし、出題ページは下記のとおりです。  
4~19ページ
- 3 試験中に問題冊子の印刷不鮮明、ページの落丁・乱丁および解答用紙の汚れ等に気づいた場合は、手を挙げて監督員に知らせなさい。
- 4 解答用紙には解答欄以外に次の記入欄があるので、その説明と解答用紙の「記入上の注意」を読み、それぞれ正しく記入し、マークしなさい。
  - ① 受験番号欄  
受験番号を記入し、さらにその下のマーク欄にマークしなさい。正しくマークされていない場合は、採点できないことがあります。
  - ② 氏名欄  
氏名・フリガナを記入しなさい。
- 5 試験開始後30分間および試験終了前5分間は退出できません。
- 6 この表紙の受験番号欄に受験番号を記入しなさい。この問題冊子は試験終了後回収します。

### II 解答上の注意

- 1 解答はすべて解答用紙の所定の欄へのマークによって行います。たとえば、

3
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と表示のある問いに対して②と解答する場合は、次の〈例〉のように解答番号3の解答欄の②をマークします。

〈例〉

解答 番号	解 答 欄									
	1	2	3	4	5	6	7	8	9	0
3	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩

受 験 番 号			

SKR08S002

1 つぎの英文を読み問に答えなさい。

Depending on where you are, this is going to be a hotter, wetter, drier, windier, calmer, dirtier, bugger or hungrier century than mankind has seen in a while. In some places, it may be deadlier, too.

The effects of climate change are diverse and sometimes contradictory. In general, they favor instability and extreme events. (a)On balance, they will tend to harm health rather than promote it.

That is the majority view of scientists trying to solve an equation ( X ) variables range from greenhouse gas concentrations and the El Niño weather pattern to mosquito ecology and human cells' ability to (b)withstand heat.

"We are not dealing with a single toxic agent or a single microbe where we can (c)put our finger with certainty on an exposure and the response," said Jonathan A. Patz, a physician and epidemiologist at the University of Wisconsin at Madison. "Climate change affects everything."

Predictions of how global warming could affect people's health are (d)crude. They are based on the experience of the past several decades, when there has been a small, well-documented rise in the temperatures of the planet's atmosphere and oceans. What that says about the future — a time when warming is expected to accelerate, but people may be able to prepare for it — is quite uncertain.

In the last quarter of the 20th century, the average atmospheric temperature rose by about 1 degree Fahrenheit. By 2000, that increase was responsible for the annual loss of about 160,000 lives and the loss of 5.5 million years of healthy life, according to estimates by the World Health Organization. The toll is expected to double to about 300,000 lives and 11 million years of healthy life by 2020.

The biggest tolls were in Africa, on the Indian subcontinent and in Southeast Asia. Most of that increased (e)burden of death and disease was from malnutrition, diarrhea, malaria, heat waves and floods. But those diseases will

play a minor role, at best, in many regions that nevertheless will feel the effects of global warming.

To organize their thinking — and to focus the attention of policymakers — researchers tend to put the health effects of climate change into five groups.

### Heat Stress

The most obvious effect of global warming is hotter weather.

Scientists predict that heat waves will be longer and more frequent in the future. Their worst-case effects may have been glimpsed in Europe's summer of 2003, the hottest <sup>(f)</sup>spell there since the 1500s. About 30,000 people died of heat-related illness, including 14,800 in France in three weeks in August.

People who were old, very young, ill, immobile or poor were at highest risk. Although the human body can adapt somewhat to chronically higher temperatures, those groups will remain vulnerable — and they are likely to <sup>(g)</sup>make up a bigger slice of the population in the future.

About 20 percent of people in industrialized countries are over age 60 today. That figure will rise to 32 percent by 2050. More people will also live in cities — 61 percent of the world's population by 2030, compared with 45 percent now. Cities are "heat islands," 9 degrees Fahrenheit warmer on average than surrounding rural areas and resistant to the cooling effects of night.

Aging and urbanization — and possibly more obesity — will put people at greater risk for heat-related illness. Nevertheless, that consequence of global warming may be easier to avoid than others, as a study published three years ago suggests.

It examined mortality on hot days in 28 cities in the last third of the 20th century. Death rates were lower in the 1980s and 1990s than in the 1960s and 1970s in most places, with the least reduction in cities of the Northeast and the Midwest. (A heat wave in Chicago in 1995 caused more than 500 deaths, the biggest U.S. toll in years.)

This steady decline in heat-stress death was almost certainly the consequence

of air conditioning, better awareness of the problem and improved medical care. "If there is a very effective <sup>(h)</sup>response system, then even in hotter temperatures you may not see more deaths," said Kristie L. Ebi, an epidemiologist and consultant in Alexandria. She helped write the health chapter of the most recent report of the United Nations' Intergovernmental Panel on Climate Change, which was this year's Nobel Peace Prize winner along with Al Gore.

### Extreme Weather

Climate change is expected to increase the severity of storms, especially ones associated with cyclical events such as the El Niño Southern Oscillation.

Flooding is the most common weather disaster, responsible for the deaths of about 100,000 people and the displacement of 1.2 billion from 1992 to 2001. The worsening of this hazard will vary by region. It is expected to change little in Southeast Asia by 2030, but it may increase 50 percent in West Africa and quadruple in Central and South America.

In addition to storms, rising oceans threaten coastal populations. Of the world's 20 megacities, 13 are at sea level. Storm <sup>(i)</sup>surges, while short-lived, can cause permanent damage, eroding land and damaging water supplies and cropland with saltwater.

Greater variability in weather patterns along with higher temperatures may lead to droughts and water shortages. Today, 1.7 billion people — about one-third of the world's population — live in places that have periodic water shortages. That number is expected to increase to 5 billion by 2025.

When it comes to food production, climate change will have varying effects. Overall, it will tend to slow the long historical decline in the number of hungry people.

In 1990, there were 520 million people at risk of hunger, according to a study by British and American scientists published in 2005. In the absence of global warming, that number was predicted to fall to 300 million by 2080. With global warming, it is expected to fall to 380 million, although under various scenarios

of greenhouse gas reductions it could drop to 320 to 340 million, according to recent mathematical modeling.

### Air Pollution

Climate change affects air pollution in two ways.

Heat speeds chemical reactions and consequently may worsen pollution from ozone and airborne particulates, or soot. It may also spur pollen production by some plants, which could in turn worsen asthma and allergies in some people.

One model of global warming's effects on air pollution in 15 eastern U.S. cities predicts that the number of days exceeding ozone standards will rise from the current average of 12 to 20 per summer by 2050. Deaths linked to that pollutant — nearly all in people who have lung or heart ailments — could go up 5 percent under that scenario.

### Waterborne and Food-Borne Disease

Higher temperatures and torrential rains are likely to cause outbreaks of some diarrheal diseases.

The incidence of cholera — a bacterial infection whose home is South Asia but that circles the world in slow epidemics — depends in part on water temperatures in the Bay of Bengal and on monsoon rains. A recent study of waterborne-disease outbreaks in the United States in the past 50 years found that 67 percent (j) were preceded by heavy rainfall.

Researchers in Australia have shown that the number of food-borne infections from salmonella bacteria goes up in hot weather.

Overall, climate change is expected to increase the burden of diarrhea, mostly in developing countries, by 2 to 5 percent by 2020.

### Vector-Borne Disease

Scientists suspect that many diseases transmitted by insects and animals will become more common, although there is more uncertainty about this than other

consequences of global warming.

Dengue and malaria, carried by mosquitoes, are most likely to increase. Under some projections, Africans will be exposed to malaria 25 percent more of the time in 2100 than they are now.

That risk, however, could be offset by controlling mosquitoes with pesticides, the use of bed nets by children and pregnant women, and better medical care. Other diseases that may become more prevalent are yellow fever (also carried by mosquitoes), schistosomiasis (by snails), leishmaniasis (sand flies) and Lyme disease (ticks).

問1 下線部(a)~(j)の意味に最も近い語(句)を下の①~④の中からそれぞれ1つ選び  
マークしなさい。

(a) On balance

- ① All in all
- ② Moreover
- ③ In comparison
- ④ Consequently

(b) withstand

- ① produce
- ② absorb
- ③ resist
- ④ consume

(c) put our finger on

- ① announce
- ② observe
- ③ guess
- ④ identify

(d) crude

- ① precise
- ② rough
- ③ wrong
- ④ enough

(e) burden

- ① knowledge
- ② duty
- ③ pressure
- ④ cause

(f) spell

- ① magic
- ② influence
- ③ weather
- ④ period

(g) make up

- ① compensate for
- ② apply
- ③ invent
- ④ account for

(h) response system

- ① countershock
- ② counterpart
- ③ countermeasure
- ④ counterblow

(i) surges

- ① centers
- ② rains
- ③ occurrences
- ④ tides

(j) were preceded by

- ① followed
- ② could predict
- ③ took place before
- ④ led to

問2 本文の内容に合うように  ~  に入れるのに最も適切なものを下の①~④の中からそれぞれ1つ選びマークしなさい。

(A) The most appropriate word for blank ( X ) is .

- ① since
- ② whose
- ③ where
- ④ although

(B) Aged people in cities will be put at greater risk than those in rural areas for heat-related illness because .

- ① the air temperature in the former is higher than in the latter
- ② the temperature difference between day and night is larger in the former than in the latter
- ③ older people are more vulnerable to heat in general than very young children
- ④ the former is more densely packed with the aged than the latter



(C) Heat-related mortality 13

- ① was examined on hot days in nearly 30 cities for the past five decades
- ② was higher in the first half than in the second half of the examined period
- ③ in Chicago was the biggest among the cities examined in the first third of the 20th century
- ④ had more steadily increased in the 1980s and 1990s than in the 1960s and 1970s in most places examined

(D) Flooding 14

- ① killed over one billion people between 1992 and 2001
- ② will cease to cause severe damage regardless of region
- ③ will occur and cause damage more frequently in Central and South America than in West Africa
- ④ is expected to occur more often with more severity in Southeast Asia by 2030

(E) About one-third of the world's population live 15

- ① on lands near the coast
- ② in the areas threatened by rising oceans
- ③ in the regions suffering water shortages repeatedly
- ④ in places with populations of 5 billion or more

(F) According to recent mathematical modeling; the number of people at risk of hunger .

- ① would decline to half the 1990 figure by 2080 without the effect of global warming
- ② will decrease by 220 million by 2080 assuming the effect of global warming is eliminated.
- ③ will increase continually despite efforts to reduce greenhouse gas
- ④ will remain at the same level if actions are taken to stop global warming

(G) Climate change affects air pollution because .

- ① heat has nothing to do with chemical reactions
- ② accelerated chemical reactions may reduce pollutants in the air
- ③ heat may help increase pollen production
- ④ the number of days exceeding ozone standards will triple by 2050

(H) Cholera .

- ① was originally endemic to the United States but may occur anywhere in the world
- ② outbreaks have something to do with water temperatures in the Bay of Bengal
- ③ is expected to occur within limited areas in South Asia in the future
- ④ is accompanied by secondary outbreaks of infections from salmonella bacteria

(I)  may be more easily avoidable than the other consequences of global warming.

- ① Heat-related diseases
- ② Diseases caused by air pollution
- ③ Waterborne and food-borne diseases
- ④ Lyme disease

(J) The best title for this passage would be .

- ① As Temperatures Rise, Health Could Decline
- ② Preventions of Heat-Related Diseases
- ③ Tips on How to Survive Global Warming
- ④ Climate Change Might Lead to Extreme Weather Events

2 つぎの英文を読み問に答えなさい。

Research is the disciplined process of investigating and seeking facts that will lead one to discover the truth about something. This truth, stated as one's thesis, is a [ 21 ] of the facts one discovers, and it must be proved conclusively to the reader by the facts selected. The thesis may not be a statement of [ 22 ] opinion or prejudice, [ 23 ] may the paper be a stringing together of related quotations and a collection of footnotes.

The research paper, a formal presentation of these discovered facts, provides the evidence one needs to defend the opinion expressed as the thesis. [ 24 ], one must state how and where these facts were found. If they were discovered from what other people have said or written, the student must tell who said them and where they were said so that the reader could find them also; if they were discovered by [ 25 ] observation, the student must describe this experience so that the reader could repeat it and observe the same phenomena or facts. The opinion, which is the thesis, <sup>(25)</sup> ( based / the material / it / on which / the analysis / of / is ), and the conclusions one draws from that material are the most important parts of the final paper. These are subjectively presented [ 26 ] the facts, which <sup>(26)</sup> provide the supporting points, are objectively presented and carefully documented.

During the process of research, the student learns to select, evaluate, and analyze facts; to discipline habits of thought and work; and, most important, to think — to create a new angle of vision. In this sense only, the research paper is [ 27 ]; but it is important enough in itself to justify the work involved in its creation.

Because nothing else so clearly reveals the true quality and merit of the writer's mind, the research paper becomes a valid [ 28 ] for judging the disciplined work habits and the intellectual maturity of the student.

問1 本文中の  ~  に入れるのに最も適切な語(句)を下の①~④の中からそれぞれ1つ選びマークしなさい。

① result      ② demand      ③ cause      ④ custom

① precluded      ② preconceived  
③ precarious      ④ precious

① nor      ② but      ③ and      ④ for

① Instead      ② Nevertheless  
③ For instance      ④ Consequently

① passive      ② direct      ③ careless      ④ detailed

① while      ② that      ③ by      ④ unless

① meaningless      ② original      ③ fictitious      ④ true

① system      ② subject      ③ revision      ④ criterion

問2 下線部(あ)の( )内の語(句)を文脈に合うように並べかえるとき、4番目に来る語(句)として最も適切なものを下の①~④の中から1つ選びマークしなさい。

- ① the analysis
- ② based
- ③ on which
- ④ the material

問3 下線部(い)の意味に最も近いものを下の①~④の中から1つ選びマークしなさい。

- ① evaluate the conclusion
- ② rely on the observation
- ③ lead to the material
- ④ underpin the thesis

3 日本文の意味になるように ( ) 内の語(句)を正しく並べかえ、3番目と7番目に来る番号をマークしなさい。ただし、文頭に来る単語も書き出しは小文字となっている。

(1) 彼女は、死にかけたときに、それまでの彼女の人生が走馬灯のように見えた。

3番目  7番目

( ① experience ② her ③ see ④ before ⑤ caused  
⑥ her life flashing ⑦ her eyes ⑧ the near-death ⑨ to ).

(2) その新薬は被験者の血圧を下げるができなかったので、試験は失敗に終わった。

3番目  7番目

( ① the trial ended ② blood pressure ③ the new drug ④ reduce  
⑤ in test subjects ⑥ when ⑦ in failure ⑧ to ⑨ failed ).

(3) 私は宇宙で生活するというのが、どんなことであるのか想像がつかない。

3番目  7番目

( ① in space ② I ③ what ④ like ⑤ live ⑥ to ⑦ is  
⑧ it ⑨ cannot imagine ).

(4) 彼が告発されたすべての罪を犯したのかどうかは誰にもわからない。

3番目  7番目

( ① guilty ② heaven ③ he ④ all the charges ⑤ whether  
⑥ of ⑦ against him ⑧ knows ⑨ was ).

(5) そのファッション雑誌の人気はここ10年間でうなぎ登りである。

3番目  7番目

( ① last ② in ③ the fashion magazine ④ skyrocketed ⑤ of  
⑥ the ⑦ decade ⑧ has ⑨ the popularity ).

(6) 賞味期限切れの商品を包装し直し、賞味期限を延ばして販売することは違法である。

3 番目  7 番目

( ① repackage ② illegal ③ it's ④ expired products ⑤ them with ⑥ to ⑦ extended ⑧ and resell ⑨ expiration dates ).

(7) 研究者たちはその病の効果的な治療法を見つけることに力を注いできた。

3 番目  7 番目

( ① researchers ② of ③ for ④ themselves ⑤ have devoted ⑥ to ⑦ looking ⑧ the disease ⑨ effective treatment ).

(8) 熱い食べ物を飲み込むと、口や喉に深刻なダメージを与えかねない。

3 番目  7 番目

( ① the mouth ② can ③ and throat ④ in ⑤ gobbling down ⑥ serious damage ⑦ hot food ⑧ to ⑨ result ).

(9) 長時間の携帯電話利用が健康を害するかどうかはまだ結論が出ていない。

3 番目  7 番目

( ① the jury ② whether ③ is hazardous ④ is ⑤ cell phone use ⑥ still out on ⑦ health ⑧ to ⑨ extensive ).

(10) 歯医者の子で痛みを伴う経験をしたことのある人ならだれでも、あの甲高いドリルの音に震え上がるだろう。

3 番目  7 番目

( ① whoever ② would ③ a painful experience ④ the sound ⑤ at ⑥ has had ⑦ cringe ⑧ of a high-pitched drill ⑨ in a dentist's chair ).

4 日本文の意味に合うように [ 51 ] ~ [ 60 ] に入れるのに最も適切な語(句)を、  
下の①~④の中からそれぞれ1つ選びマークしなさい。

- (1) セント・ジョンズ・ワートを抗うつ剤と併用すると、命にかかわるアレルギー反応を引き起こしうる。

Use of St. John's Wort in [ 51 ] with an anti-depressant can lead to a life-threatening allergic reaction.

① term            ② coincidence    ③ addition        ④ conjunction

- (2) 十代の若者にとって外見は重要なので、彼らの多くがニキビのことを深刻に悩みすぎている。

[ 52 ] is important for teenagers, so many of them are too worried about acne.

① Stature        ② Appearance    ③ Posture        ④ Outlook

- (3) 歯に害を及ぼす可能性が最も高いものは酸による攻撃である。

The thing most [ 53 ] to harm your teeth is an acid attack.

① positive       ② happening     ③ possible       ④ likely

- (4) 今日、ストレスはこれまでになく大きくなっている。

[ 54 ], stress is at an all time high.

① In this day and age            ② Under some circumstances

③ At one time                      ④ In those days

- (5) 適切に通気口をつけずに古い建物の屋根を張り替えると、危険なカビの発生につながるかもしれない。

Replacing a roof on an old building without adequate venting may trigger the [ 55 ] of dangerous mold.

① paucity        ② deficiency    ③ outbreak       ④ turmoil



