

令和 7 年度

新潟大学大学院保健学研究科  
博士前期課程

学力検査試験問題

英 語

注 意 事 項

1. この問題冊子は、試験開始の合図があるまで開いてはいけません。
2. 問題冊子は、表紙を入れて 7 枚、解答用紙は 2 枚、他に下書き用紙 1 枚があります。(落丁、乱丁、印刷不鮮明の箇所などがあつた場合は申し出てください。)
3. 解答は、すべて解答用紙の指定された箇所に記入してください。
4. 受験番号は、各解答用紙の指定された箇所に必ず記入してください。
5. 解答時間は、9 時 00 分から 10 時 30 分までの 90 分間です。
6. 一般選抜受験者は「A 問題」および「B 問題」を解答し、社会人特別選抜受験者は「A 問題」のみ解答してください。
7. 問題冊子と下書き用紙は持ち帰ってください。

## A 問題（一般選抜・社会人特別選抜 共通問題）

次の文章を読んで、設問に答えなさい。

### Q&A: Blood products - Blood donation

Q: ( ① )

A: Yes. Remember that you will only be accepted as a blood donor if you are fit and well. Your health and well-being are very important to the blood service. The needle and blood bag used to collect blood come in a sterile pack that cannot be reused, so the process is made as safe as possible.

Q: ( ② )

A: The criteria for donor selection varies from country to country, but blood can be donated by most people who are healthy and do not have an infection that can be transmitted through their blood. The age at which people are eligible to give blood varies, but is commonly between the ages of 17 and 65. Some countries accept donations from people from the age of 16 and extend the upper age limit beyond 65 years. Healthy adults can give blood regularly – at least twice a year. Your local blood service can tell you how frequently you can give blood.

Q: ( ③ )

A: Safe blood saves lives. Blood is needed by women with complications during pregnancy and childbirth, children with severe anaemia, often resulting from malaria or malnutrition, accident victims and surgical and cancer patients. There is a constant need for a regular supply of blood because it can be stored only for a limited period of time before use. Regular blood donation by a sufficient number of healthy people is needed to ensure that blood will always be available whenever and wherever it is needed. Blood is the most precious gift that anyone can give to another person – the gift of life. A decision to donate your blood can save a life, or even several if your blood is separated into its components – red cells, platelets and plasma – which can be used individually for patients with specific conditions.

Q: ( ④ )

A: Just squeeze the inside of your elbow tightly and you will get a quick idea of what the needle feels like. All you should feel is a gentle pressure and a momentary “pinprick” sensation. Blood donation is very safe and discomfort or problem during or after donating is very uncommon.

Q: ( ⑤ )

A: The blood service is concerned with the welfare of both the blood donor and the recipient (patient). Donors are often asked not to donate blood for a period of time in the interests of their safety and/or that of the blood supply. You should not give blood if your own health might suffer as a result. (省略) You should not donate blood if it might cause harm to the patient who receives it. Blood can transmit life-threatening infections to patients who receive blood transfusions. (省略)

Q: ( ⑥ )

A: You should feel great for selflessly giving someone the gift of blood.

Q: ( ⑦ )

A: In most countries, the volume of blood taken is 450 millilitres, less than 10 per cent of your total blood volume (the average adult has 4.5 to 5 litres of blood). In some countries, a smaller volume is taken. Your body will replace the lost fluid within about 36 hours.

Q: ( ⑧ )

A: Whether you are a first-time or regular donor, the blood service must make sure that you will come to no harm by donating blood. This includes checking your blood to be sure it will be safe for the person who receives it. Before you give blood, you will be asked questions about your medical history, including any medication you are taking, and about your current health and lifestyle. You may also be asked about recent travel; for example, if you live in a country where there is no malaria, you may be asked whether you have recently visited a tropical country. (省略) It is very important to be truthful about any reasons why your blood might not be suitable. Although blood is always tested for infections that can be transmitted by transfusion, such as HIV, hepatitis B and C, and syphilis, a test may not be able to detect a very recent infection. This means that even though the blood may test negative for a particular

infection, it might still infect a patient receiving a blood transfusion. After answering the questions you will also be given a brief medical examination that may include checking your pulse and blood pressure and ensuring that your weight meets a certain minimum. A drop of blood will then be taken from your fingertip to check that giving blood will not make you anaemic. Your health is very important to the blood transfusion service and blood will not be taken unless you can safely give a donation that day. Donating blood is very simple. You will be made as comfortable as possible, usually in a special chair or on a bed. The area inside one of your elbows will be cleaned with an antiseptic solution before a trained health worker inserts a sterile needle, connected to a blood collection bag, into your vein. It usually takes about 10 minutes to donate blood. After resting for 10 or 15 minutes and taking some refreshment, you will be able to return to your normal activities, although you should avoid strenuous activity for the rest of the day. You should drink plenty of fluids over the next 24 hours.

Q: Can I give blood after vaccination against SARS-CoV-2?

A: Consistent with current general global practice, recipients of SARS-CoV-2 vaccines that do not contain live virus may donate blood if they feel well. As SARS-CoV-2 vaccines have been developed only recently, in settings where deferrals would not compromise blood supply availability, the National Blood Transfusion Service may consider implementing a precautionary deferral period of up to seven days to minimize the impact of call-backs from donors who develop symptoms subsequent to donating soon after vaccination. Recipients of live virus vaccines (e.g., virus vector based or live-attenuated virus vaccines) should be deferred for four weeks, consistent with current practices. Persons who feel unwell after receiving a SARS-CoV-2 vaccine should be deferred for seven days after complete resolution of symptoms, or as specified after receipt of a virus vector-based or live-attenuated vaccine, whichever is the longer period. In situations where it cannot be established whether the donor received a live virus vaccine, a four-week deferral period should be applied. (省略)

出典

WHO, Q&A: Blood products - Blood donation, 6 June 2022. から一部改変・引用

<https://www.who.int/news-room/questions-and-answers/item/blood-products-why-should-i-donate-blood>

問1 ①～⑧にそれぞれ当てはまる適切な文章はどれか。下記の選択肢から番号で答えなさい。

1. Why should people donate blood?

2. What happens when I give blood?
3. How much blood will be taken? Will I have enough?
4. Is giving blood safe?
5. Does it hurt?
6. Who can give blood, and how often?
7. Who should not give blood?
8. How will I feel after giving blood?

問2 下線部について具体的な感染症名を3つ文章中から書き出さない。

問3 SARS-CoV-2 ワクチンを接種した人の献血について正しいのはどれか。下記の選択肢から1つ選び番号で答えなさい。

1. 献血をしてはいけない。
2. 生ワクチン接種後4週間以内であれば献血をしてもよい。
3. 接種後に体調不良がなければ経過期間の制限なしで献血をしてもよい。
4. 接種後に体調不良を感じた場合は体調回復後7日が経過していれば献血をしてもよい。
5. 接種後の体調不良の有無およびワクチンの種類によって献血をしてもよい接種後経過期間が異なる。

## B 問題 (一般選抜 問題)

次の文章を読んで、設問に答えなさい。

Every country is affected by obesity, with some lower income countries showing the highest increases in the last decade. No country has reported a decline in obesity prevalence across their entire population, and none are on track to meet the World Health Organization's (WHO) target of 'no increase on 2010 levels by 2025'. But there is hope following the introduction of new comprehensive WHO recommendations adopted in 2022. We now need to increase efforts to prevent, manage and treat obesity throughout the life course. (A) Action must be decisive, people-centred and integrated in order to increase our chances of successfully preventing and treating obesity.

The estimates for the continuing increase in obesity prevalence are based on published trends from 1975 to 2016. The period from 2020 to 2022 was marked by extensive restrictions or 'lockdowns' in many countries that appear to have increased risk of weight gain by curtailing movements outside the home, exacerbating dietary and sedentary behaviours linked to weight gain, and significantly reducing access to care. In addition, many national surveys and measurement programmes which monitor weight and weight gain were halted. (B) A rise in obesity prevalence, which appears to have occurred especially among children, may prove hard to reverse, and suggests that a side-effect of managing the COVID-19 pandemic is a worsening of the obesity epidemic.

The estimates for global levels of overweight and obesity ( $\text{BMI} \geq 25\text{kg/m}^2$ ), also referred to as high BMI throughout this Atlas, suggest that over 4 billion people may be affected by 2035, compared with over 2.6 billion in 2020. This reflects an increase from 38% of the world's population in 2020 to over 50% by 2035 (excluding children under 5 years old).

The rising prevalence of obesity is expected to be steepest among children and adolescents, rising from 10% to 20% of the world's boys during the period 2020 to 2035, and rising from 8% to 18% of the world's girls.

Projected figures for the economic impact of overweight and obesity ( $\text{BMI} \geq 25\text{kg/m}^2$ ) from 2020 to 2035 are shown in previous studies (Okunogbe et al, 2022, 2021). These show an impact of US\$1.96 trillion in 2020 rising to over US\$4 trillion in 2035, at constant US\$ value. Here, economic impact includes both the healthcare costs of treating obesity and its consequences and the impact of high BMI on economic productivity, with high BMI contributing to absenteeism, presenteeism (reduced productivity while at work), and premature retirement or death. The economic impact is estimated to reduce global GDP by 2.4% rising to 2.9% by 2035. These are annual economic impacts which compare to the estimated impact of COVID-19 which caused the

world economy to shrink by 3% of GDP during 2020, the pandemic's worst year (World Bank, 2022).

出典

World Obesity Federation, World Obesity Atlas 2023. から一部改変・引用

[https://www.worldobesityday.org/assets/downloads/World\\_Obesity\\_Atlas\\_2023\\_Report.pdf](https://www.worldobesityday.org/assets/downloads/World_Obesity_Atlas_2023_Report.pdf)

問1 下線部(A)を日本語に訳しなさい。

問2 COVID-19 流行下での大規模な制限やロックダウンにより体重増加のリスクが高まった要因として挙げられているものを3つ日本語で答えなさい。

問3 下線部(B)を日本語に訳しなさい。

問4 高 BMI が経済的生産性に及ぼす影響として挙げられている要因を文章中から4つ抜き出しなさい。