HBP   August 2025 Entrance Examination

<u>Writing</u>

 Discuss what we should do to prepare for the next pandemic.

In the written examination, basic biological questions or social issues are given, assessing the candidates' ability to think logically and to explain and express their opinions. Given that candidates answer the questions in English, the exam also assesses candidates' level of English proficiency. This question asks what measures should be taken to prepare for a future pandemic (a global outbreak of infectious disease). Drawing on past global infectious disease outbreaks, including COVID-19, the question evaluates the candidates' ability to analyze challenges and propose countermeasures from multiple perspectives. These include not only medical and biological approaches such as prevention and treatment, but also broader considerations such as social and economic activities, information dissemination, legal frameworks, and social security. Candidates are expected to explain their ideas logically and coherently.

<u>Debate</u>

 Public research funding for universities should prioritize diversity rather than concentrating resources on specific disciplines.

In the group session assessment, candidates debate a given topic by taking either the pro or con position. The purpose is to evaluate candidates' overall abilities, such as scientific thinking skills, the ability to logically and clearly explain their own thoughts, the ability to understand others' opinions, the ability to grasp the overall discussion and respond appropriately, and teamwork skills. This question addresses the issue of how public research funding should be allocated to universities. While universities conduct research in a wide range of fields, the question invites discussion on whether limited public research funds should be concentrated in specific fields or distributed broadly across diverse disciplines. Candidates are expected to consider the advantages and disadvantages of each approach, as well as the role and expectations of research at universities, and to discuss the issue from multiple perspectives. Through this debate, the abilities described above are assessed.

HBP   January 2026 Entrance Examination

Discuss how artificial intelligence (AI) technologies can be utilized to promote the development of life science research.

In the written examination, basic biological questions or social issues are given, assessing the candidates' ability to think logically and to explain and express their opinions. Given that candidates answer the questions in English, the exam also assesses candidates' level of English proficiency. This question asks candidates to discuss how artificial intelligence (AI) technologies can be utilized to advance life science research. Rapidly developing AI technologies are increasingly being introduced into the field of life sciences. The exam asks candidates to discuss the advantages and disadvantages of introducing AI from multiple perspectives, citing both current and potential future examples of its application, and assesses whether the candidates can logically explain how AI is expected to contribute to the advancement of life science research.

Discuss the benefits and limitations of applying AI in life science research.

In the written examination, basic biological questions or social issues are given, assessing the candidates' ability to think logically and to explain and express their opinions. Given that candidates answer the questions in English, the exam also assesses candidates' level of English proficiency. This question addresses the use of artificial intelligence (AI) in life science research. AI is expected to be utilized across a wide range of fields and contexts within life science research. The exam tests candidates' ability to logically discuss the advantages and strengths of applying AI, as well as its limitations and disadvantages, including aspects that cannot be addressed by AI, from multiple perspectives, and to explain how AI should be appropriately utilized in life science research.

<u>Debate (on site)</u>

   Debate whether gene-editing technologies should be applied to the human germline.

In the group session assessment, candidates debate a given topic by taking either the pro or con position. The purpose is to evaluate candidates' overall abilities, such as scientific thinking skills, the ability to logically and clearly explain their own thoughts, the ability to understand others' opinions, the ability to grasp the overall discussion and respond appropriately, and teamwork skills. This question asks candidates to discuss the pros and cons of applying the gene editing technology, which is increasingly being applied to various organisms and human gene therapy, to human germ cells. The exam expects multifaceted discussion of the benefits, issues, and risks of this application from medical, biological, ethical, economic, and sociological perspectives. Through this debate, the abilities described above are assessed.

<u>Debate (online)</u>

   Debate whether the release of gene-edited organisms into the environment should be prohibited.

In the group session assessment, candidates debate a given topic by taking either the pro or con position. The purpose is to evaluate candidates' overall abilities, such as scientific thinking skills, the ability to logically and clearly explain their own thoughts, the ability to understand others' opinions, the ability to grasp the overall discussion and respond appropriately, and teamwork skills. This question asks candidates to discuss whether the release of genome-edited organisms into the environment should be prohibited. Genome editing technology is being applied to a variety of organisms, including laboratory animals, agricultural crops, and livestock, and applications such as pest control are also being explored. The exam expects candidates to discuss the potential benefits of such organisms, the potential impacts on ecosystems if they are released into the environment, and related safety concerns, and to debate whether their release should be prohibited from multiple perspectives, including biology, ecology, bioethics, and sociology. Through this debate, the abilities described above are assessed.