

2025 年度名古屋大学大学院医学系研究科博士前期課程

総合保健学専攻

[一般選抜・社会人特別選抜]

専門科目 出題の意図

保健学領域における専門的な学力を問う。

英 語 出題の意図

科学英語の基礎的読解力および保健学領域における専門的な学力を問う。

面 接 質問内容例

進学の実機、希望する研究内容、それに関する知識と理解度、国際性が求められる研究
大学大学院生として入学後に取組むべきこと、将来への展望（思い描くキャリアパス、博
士後期課程への進学希望）など

2025 年度名古屋大学大学院医学系研究科博士後期課程

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英 語 出題の意図

科学英語の基礎的読解力および保健学領域における専門的な学力を問う。

Examinee Number	
受験番号	

Nagoya University Graduate School of Medicine

2025年度 名古屋大学大学院医学系研究科

Entrance Examination for the Doctoral Program

博士後期課程入学試験

English

英語

Course in Radiological and Medical Laboratory Sciences

Field of Pathophysiological Laboratory Sciences

医療技術学コース 病態解析学分野

August 29(Thu) 11:00~12:00

8月29日(木)

Important Points

注意事項

1. Do not open the examination booklet until directed to do so.

試験開始の合図まで、この冊子を開いてはいけません。

2. This booklet has 5 pages, including the cover page. The answer sheet follows each question sheet.

この冊子のページ数は問題が表紙を含めて5ページで、解答用紙は問題用紙の後に続きます。

3. If you find a problem in the booklet, such as omission of page or unclear print, please raise your hand and wait for a director.

落丁、乱丁、印刷不鮮明の箇所等があったら、直ちに申し出てください。

4. First write your examinee number clearly in the space right above on each answer sheet.

解答にかかる前に、すべてのページ右上の所定の箇所に受験番号を記入してください。

5. When providing answers, select [] from [] questions. Before writing your answers, enter the number of the question you have selected in the designated column on the answer sheet (in this booklet on page []).

解答は、__問中から__問を選択して解答用紙(本冊子5ページ)の所定の欄に選択した問題番号を記入した上で、解答してください。

6. Your answer must be written in the space indicated on each answer sheet, in the designated language. Answers written outside the designated space will not be considered as valid answers.

解答は、解答用紙に記入してください。解答用紙の所定欄以外に記入したものは無効です。

7. You must stay at the examination venue until the time allotted for the examination expires.

試験終了時刻まで退出してはいけません。

8. Do not take this booklet out with you when you leave the examination venue.

この冊子は持ち帰ってはいけません。

Entrance examination for the Doctoral Program of Nagoya University Graduate School of Medicine

大学院医学系研究科博士後期課程試験問題

【問題文】

[1] Read the following text and answer the questions in English.

この部分につきましては、著作権の都合により公開いたしません。

(出典 : Lydia W.S. Finley. What is cancer metabolism? Cell 2023;186(6):1670-1688. 出題の都合上、原文の一部に変更を加えている)

(注)

aberrant, 異常な、amenable, 従順な、exploit, 利用する、fermentation, 発酵、dub, 呼ぶ、sheer ubiquity, まったくの遍在性、supraphysiological, 生理学的範囲を超える

【設問】

Q1. Write the characteristics that distinguish cancer cells from normal cells, citing phrases from the text.

Q2. Choose the words that correspond to (A) to (C) in Figure 1 from the list below and write the numbers in the parentheses.

- ① Aerobic respiration
- ② Aerobic glycolysis
- ③ Anaerobic respiration
- ④ Anaerobic glycolysis

A () B () C ()

Q3. Choose the words that correspond to (a) to (c) in Figure 1 from the list below and write the numbers in the parentheses.

- ① Fermentation
- ② Oxidation
- ③ Warburg effect
- ④ Pasteur effect

a () b () c ()

Q4. Write the correct interpretation of the "Warburg effect" with reference to the description in the text.

【正解・解答例】

Q1. Write the characteristics that distinguish cancer cells from normal cells, citing phrases from the text.

aberrant proliferation, survival, migration, and cell fate control

Q2. Choose the words that correspond to (A) to (C) in Figure 1 from the list below and write the numbers in the parentheses.

- ① Aerobic respiration
- ② Aerobic glycolysis
- ③ Anaerobic respiration
- ④ Anaerobic glycolysis

A (①) B (④) C (②)

Q3. Choose the words that correspond to (a) to (c) in Figure 1 from the list below and write the numbers in the parentheses.

- ① Fermentation
- ② Oxidation
- ③ Warburg effect
- ④ Pasteur effect

a (④) b (①) c (③)

Q4. Write the correct interpretation of the "Warburg effect" with reference to the description in the text.

Respiration is rarely damaged in cancer cells. Rather, aerobic glycolysis is essentially overflow metabolism—a product of cells taking up nutrients in excess of their demands

Entrance examination for the Doctoral Program of Nagoya University Graduate School of Medicine

大学院医学系研究科博士後期課程試験問題

【問題文】

[2] Read the following text and answer the questions in English.

この部分につきましては、著作権の都合により公開いたしません。

(出典：Paranjape K, et al. The Value of Artificial Intelligence in Laboratory Medicine. Am J Clin Pathol. 2021;155(6):823-831.
出題の都合上、原文の一部に変更を加えている)

(注)

state-of-the-art, 最先端の、stakeholders, 利害関係者、prerequisites, 必要条件

【設問】

Q1. Choose the most appropriate word for ①, ②, ③, and ④ from the following.

[results, perspectives, technologies, tools]

① _____ ② _____ ③ _____ ④ _____

Q2. In Figure 1, which of (A) through (F) represents "organizational value" ?

Q3. In Figure 2, which of (a) through (d) represents "unsure attitude" ?

Q4. What are two keywords that apply to 【 I 】 and 【 II 】 ?

【 I 】 _____

【 II 】 _____

Q5. What is the concern with the introduction of AI in the laboratory medicine?

【正解・解答例】

Q1. Choose the most appropriate word for ①, ②, ③, and ④ from the following.
[results, perspectives, technologies, tools]

① technologies ② perspectives ③ results ④ tools

Q2. In Figure 1, which of (A) through (F) represents "organizational value" ?

A

Q3. In Figure 2, which of (a) through (d) represents "unsure attitude" ?

c

Q4. What are two keywords that apply to 【 I 】 and 【 II 】 ?

【 I 】 (organizational value)

【 II 】 (quality of care)

Q5. What is the concern with the introduction of AI in the laboratory medicine?

Specific knowledge on AI in the medical community at large is still poor.