2025年度(第2回)名古屋大学大学院医学系研究科博士課程入(進)学・転入学試験

外国語(英語)試験問題

Entrance Examination for the Doctoral Course of Nagoya University Graduate School of Medicine 2025 (December exam) English Examination (Mandatory for All Examinees)

第 124 回論文博士外国語試験 英語試験問題

試験時間 2024年12月17日(火)9:00-11:00

Examination Date and Time December 17, 2024 (Tue.) 9:00 – 11:00

【注意事項】Exam rules and regulations

• 受験票を机上に置いてください。

Put your admission ticket for the examination on the desk.

・ 試験中は、時計(計時機能だけのもの)、筆記用具以外の使用は認めません。

You are allowed to have in your possession or access to only permitted items such as watches/wristwatches which function as a clock only and writing instruments during the exam.

• 全ての携帯電話・スマートフォンなどの電源は必ず切ってカバンの中にしまってください。

You must turn off your smartphone and any digital devices. Put them in your bag.

• 試験は監督者の時計により実施します。

The exam will be timed by the invigilator's watch.

• 試験時間中の退室はできません。トイレに行きたくなった場合は手を挙げて待ち、試験監督者の指示に従ってください。

You will not be allowed to leave the exam room during the exam. If you need to use the toilet, you should notify the exam invigilators by remaining seated and raising your hand. Follow the instructions from the invigilators.

• 試験終了後は、指示をするまで退室しないでください。

You are not allowed to leave the room until granted permission by the invigilator after the exam is done.

• 問題冊子には、指示があるまでさわらないでください。

You are not allowed to touch question papers until you are instructed to do so.

• 開始と同時にまずは試験問題および解答用紙の枚数を確認してください。 表紙を含み、全部で11枚です。

 $2\sim4$ 枚目は試験問題 [1]、5、6 枚目が試験問題 [1] の解答用紙、7、8 枚目は試験問題 [2]、 $9\sim11$ 枚目が試験問題 [2] の解答用紙です。

As soon as the exam begins, make sure that you have 11 sheets including a cover sheet. The second, third and fourth sheets are Exam Question [1], and the fifth and sixth are the answer sheets for Exam Question [1]. The seventh and eighth sheets are Exam Question [2], and the nineth, tenth and eleventh are the answering sheets for Exam Question [2].

解答する前にホチキスをはずしてください。

Remove the staples before you start answering.

解答用紙には氏名を記入せず、受験番号のみを記入してください。

You are not allowed to write your name anywhere in the answer sheets. Write down your Examinee's number only in the indicated areas.

問題は2題あるので2題とも解答し、[1]、[2] それぞれの解答用紙に記入してください。

There are two questions, and you must answer both. Write your answers on each answer sheet.

解答欄が足りない場合は、「続く」と明示し解答用紙の裏面に記入してください。

If there is no more space to answer, you must specify "Continue" and go on the back of the answer sheet.

• 不明な点がある場合は、挙手によりお知らせください。

If you have a question at any time, you must raise your hand and wait until an invigilator comes to you.

令和8年度については、TOEFL ITPの文法及びリーディングセクションを用いて実施する。

英語試験問題 [1] English Examination (Mandatory for All Examinees)

[1]

Read the following text taken from an article: [Nat. Med. 30(8):2097-2098, 2024], and answer the questions in **English** or **Japanese** based on the text.

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*注釈; Glossary

breadth: 幅広さ; width, range.

phase x trial/study: 薬物の x 段階目の臨床試験; the x stage of a clinical trial studying a drug.

leveraging: 活用して, 利用して; using (something) to maximum advantage, taking advantage of.

adjuvant setting: 補助療法; additional cancer treatment given after the primary treatment.

recurrence: 再発; happening again.

indication: 適応症; a disease that is susceptible to treatment by a particular medicine.

first-line: 第一選択, 最初に使われる; the first treatment given for a disease.

dismal: ひどく悪い; without hope, very bad.

regimen: 治療のための体系的計画; a systematic plan for therapy.

off-the-shelf: 標準仕様の, 既成の, すぐに使える; not specially designed.

intractable: 難治性の; hard to cure/treat.

英語解答用紙 [1] English Examination Answer Sheet

Q1. Explain the mode of action of mRNA-bas	sed vaccines.
Answer:	
Q2. What is the reason given in the text that	SARS-CoV-2 vaccine development is still ongoing?
Answer:	
Answer:	
-	e a lower dose than conventional mRNA vaccines? Describe the
reason/mechanism within two lines.	
Answer:	
Q4. Besides COVID-19 and cancers, extract from the text.	three candidate diseases that could be targeted by mRNA vaccines
Answer:	·
Q5. Select the most suitable word for "(1)(a) economical)" from the options below
b) versatile	
c) individualized d) focused	
Answer:	
Q6. Select the most suitable word for "(2)(comparative form of the following adjective.)" from the options below. Note that the second " $^{(2)}$ ($)$ " is the
a) many	
b) deleterious c) common	
d) few	
Answer:	

受験番号	
aminee's number	

英語解答用紙 [1] English Examination Answer Sheet

Q7. Select the most suitable word for "(3)()" from the options below.
a) in remission	
b) in progress	
c) active	
d) uncharacterized	
Answer:	
Q8. Select the most suitable word for "(4)()" from the options below.
a) all	
b) any	
c) most of	
d) not all	
Answer:	
Q9. How is deep learning being used in mR	NA-based vaccine development?
Answer:	
Q10. Summarize the text within five lines.	
Answer:	

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受験番号

Examinee's number

英語試験問題 [2] English Examination (Mandatory for All Examinees)

[2]

Read the following text taken from an article: [Robbins, H.A., N Engl J Med 2024; 391: 292-294], and answer the questions in **English** or **Japanese** based on the text.

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*注釈; Glossary

on the cusp of: 移行期にある、~しようとしている; to be at the time when a situation or state is going to change.

alluring: 魅力的な; highly attractive and able to arouse hope or desire.

randomized, controlled trial: ランダム化比較試験(研究の対象者を無作為にグループ分けして、治療法などの効果を検証する科学的研究方法); a scientific research method in which subjects in a study are randomly grouped to test the effectiveness of a treatment or other method.

GRAIL: Galleri 検査を開発した会社; the company that developed the Galleri test.

mortality: 死亡者数、死亡率; the number of deaths during a particular period of time among a particular type or group of people.

unblinded: (臨床試験で) 非盲検 の; (subjects, investigators, and analysts are) informed about the treatment groups in clinical trials.

mammogram: マンモグラム, 乳房 X 線撮影像; an X-ray image of the soft tissue of the breast.

英語解答用紙 [2] English Examination Answer Sheet

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Q1. What is the primary purpose of multicancer early detection (MCED) tests?
Answer:
Q2. Select ALL the biomarkers that are measured by MCED tests from the following options.
Q2. Ocicot ALE the biomarkers that are measured by MOLD tests from the following options.
a) Tianna kianan madana
a) Tissue biopsy markers
b) Cell-free protein fragmentation
c) Cell-free DNA methylation
d) Cell-free DNA mutations
Answer:
Q3. What is the primary objective of the NHS–Galleri study?
a) To statistically reduce the incidence of stage III and IV cancers
,
b) To prove that MCED tests can detect early-stage cancers
c) To replace all standard cancer screenings with MCED tests
d) To make MCED tests available to 1 million people by 2024
Answer:
Q4. Why did NHS England decide not to proceed with the MCED test rollout in 2024?
a) The test was too expensive to implement.
b) Early results were not convincing enough.
c) The public showed low interest in the test.
d) The technology was not yet approved.
u) The technology was not yet approved.
Answer:

受験番号

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英語解答用紙 [2] English Examination Answer Sheet

Q5. According to the text, why is an RCT using cancer-specific mortality as an endpoint important in assessing MCED tests?
a) The majority of healthy people will not benefit from cancer screening.
b) It can help in determining the cost-effectiveness of the test.
c) It allows commercial entities to influence the trial's outcome.
d) It provides quicker results than other trial designs.
Answer:
Q6. Select <u>ALL</u> of the following that meet the minimum criteria for disease screening described in the text.
a) The benefits of the test must be in excess of its harms.
b) The test must be executable.
c) The test must be capable of detecting presymptomatic disease.
d) The test must treat the detected presymptomatic disease.
Answer:
Q7. Which of the following is identified in the text as a potential drawback of MCED testing?
a) Participants' skipping annual testing
b) Overdiagnosis of certain cancer types
c) False reassurance from negative results
d) An increase in the cost of cancer treatment
Answer:

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Q8. Why might it be difficult to recruit participants for the U.S. National Cancer Institute's trial?		
a) The trial will be too costly.		
b) MCED tests are already available.		
c) Participants don't trust new methods.		
d) Early results of the trial were not sufficiently compelling.		
Answer:		
Q9. What does the text describe as the potential impact of MCED tests on healthcare finance?		
Answer:		
Q10. What does the author recommend to health authorities regarding MCED tests?		
a) They should work closely with commercial companies to promote early implementation.		
b) They should focus on expanding existing screening programs in parallel.		
c) They should prioritize making the tests affordable for the public.		
d) They should ensure that sufficient evidence of benefits is available before use.		
Answer:		

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