

February 4, 2023

令和5年度

島根大学大学院医学系研究科  
医科学専攻（修士課程）入学者選抜

試験問題

小論文

English Test(Short essay)

（60分間）

Time limit: 60 minutes

注意

- 1 問題用紙は指示があるまで開いてはいけません。
- 2 問題用紙は表紙を含めて4枚です。
- 3 問題用紙は持ち帰ってください。

Notice:

1. Do not open this cover until you have been instructed to by a proctor.
2. The question sheet consists of 4 pages including this cover.
3. You must bring the question sheet back when you are finished.

Read the following sentences and answer the questions briefly in either English or Japanese.

(この部分につきましては、著作権の関係により、公開しません。)

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(Rhys Hamon and Miranda P. Ween: E-Cigarette Vapour Increases ACE2 and TMPRSS2 Expression in a Flavour- and Nicotine-Dependent Manner. *Int J Environ Res Public Health*. 2022 Nov; 19(22): 14955. Modified)

Question. 1: Please describe how does SARS-CoV-2 appear to gain access to human critical organs.

Question. 2: Please explain angiotensin-converting enzyme 2 (ACE2).

Question. 3: Please explain the function of the S glycoprotein of SARS-CoV-2.

Question. 4: Please describe how may macrophages play a role in the transition of SARS-CoV-2 from the lungs to other tissues.

Question. 5: Please describe one possible cause of the reason why smokers may increase the severity of COVID infections.

Question. 6: Please describe One limitation.