

令和 8 年 1 月 14 日実施

名古屋市立大学大学院医学研究科博士課程入学試験(2 回目)

医学・生物学一般問題(問題用紙1枚、解答用紙2枚)

Select any two of the following four questions, and write your answers on answer sheets provided.

Use one sheet per question (if you need more space for answers, continue them on the reverse side of the sheet). Please make sure that you write the number of question you selected in the answer sheet.

<Question 1>

Describe microRNA.

<Question 2>

Social and economic conditions influence health outcomes beyond clinical care.

Explain the concept of social determinants of health (SDH), and discuss how social prescribing may help reduce health disparities. Consider potential challenges in implementing such approaches.

<Question 3>

What is the autonomic nervous system? Describe its types and functions.

<Question 4>

A certain hereditary disease follows an autosomal recessive inheritance pattern.

If both parents are carriers:

- a) Calculate the probability that their child will develop the disease.
- b) If an older sibling has already developed the disease, does the probability that the next child will develop the disease change?
- c) In general, why do severe hereditary diseases tend to follow a recessive rather than a dominant inheritance pattern? Discuss from an evolutionary perspective.