

令和4年8月2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(1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>

Explain the mechanism how intestinal environment such like microbiome influences functions and pathology of the brain.

<Question 2>

Explain the relationship between obesity and chronic inflammation in terms of disease development.

<Question 3>

Explain four major treatments for cancers.

<Question 4>

Regarding post-translational modification (PTM) of protein, answer the following two questions (Q1 and Q2).

Q1: Describe examples of PTM of proteins in mammals.

Q2: Select one of the PTM listed above, and explain the characteristics of PTM, such as the target amino acids, the related enzymes, the organelle in which the modification occur, and its biological significance.