**Personal Statement: Part B
Topics of Interest**

**(if you have selected “Science & Applied Science” as your first choice**

**in “10. Desired Area(s) of Study” in online application form)**

Applicant’s full name:

*Complete all sections in English. Respond to all questions. Part A and Part B should be written in an essay format.*

*Although you may consult teachers, counselors, and friends, all final writing must be your own words. If we detect*

*plagiarism, including material copied from websites, your application will not be considered any further. If you*

*advance to the interview stage, you may be asked to answer questions or elaborate on your statement.*

*Use 12-point font single-space (Times New Roman preferred).*

Explain any two of the following topics in one A4 sheet or within the specified frame:

・ Why do artificial satellites not fall to earth?

・ If you hang on a tree and jump vertically into a cart moving with certain speed, what will happen to the speed of the moving cart? If you stand on a vehicle moving in the same direction but with a higher speed than the moving cart and then jump into the cart, what about the change to the speed of the moving cart in this case?

・ What are the causes of acid rain and how does acid rain affect your neighborhood trees, plants, public gardens and infrastructures?

・ You can hear sound through a window even from a musical instrument that is not visible. Why can we hear sound around a corner but not see light? Explain the phenomena with reference to the characteristics of visible light waves and sound waves.

・ Animal homeostasis is regulated by the coordination of the autonomic nervous system and endocrine system. Explain an example of homeostasis regulated by these two systems.

Note: Set and specify the detailed conditions necessary to explain the problem. Also, explain other phenomena that occur by the same principle.