OPCIÓ A/OPCIÓN A

Part A. Reading Comprehension.

Read the following text:

RESEARCH SHIP TRAPPED IN ANTARCTIC ICE
BECAUSE OF WEATHER, NOT CLIMATE CHANGE

The Russian ship Akademik Shokalskiy is stuck in the Antarctic, in an area where there has been an increase in sea ice extent since the late 1970s, making ship operations difficult. Is this situation evidence that global warming is exaggerated?

The impact of climate change on ice at both poles is complex. Actually, the two polar regions have experienced very different trends in ice extent. Arctic sea ice has been declining in extent in every month of the year, with the maximum loss of almost 14% per decade being found in September. In contrast, sea ice extent around the Antarctic has increased in every month of the year with the largest increase being almost 4% per decade in March.

The reasons for the trends in sea ice are still being debated. However, for the Arctic it is estimated that the emission of greenhouse gases has contributed 50–60% of the decline of Arctic sea ice. The remaining contribution is believed to come from natural variability. But in the Antarctic the reason for the increase in ice is less clear. The pattern of sea ice change around the Antarctic is dominated by a decrease to the west of the Antarctic Peninsula and an increase across the Ross Sea, which can be attributed to more storm activity between these two areas and to the strength and direction of the winds. This pattern of change is consistent with the increasing temperatures observed over the west Antarctica, where temperatures have risen as much as anywhere in the southern hemisphere.

Adapted from an article by John Turner, theguardian.com, 3 January 2014
I. Answer the following questions using your own words but taking into account the information in the text. (2 points: 1 point each)

   a. Why is the impact of climate change on ice at both poles complex?
   b. Which factors influence the patterns of sea ice change in the Antarctic?

II. Are the following statements true (T) or false (F)? Identify the part of the text that supports your answer by copying the exact passage on the answer sheet. (1.5 points: 0.5 each)

   a. The Arctic region has had an increase of sea ice throughout the year, and mainly in September.
   b. Scientists know the causes of the trends in sea ice.
   c. The decrease in sea ice in the west of the Antarctic Peninsula can be attributed to higher temperatures.

III. Find a synonym for each of the four definitions below from these six options. (1 point: 0.25 each)

   impact  actually  declining  loss  strength  remaining

   a. indeed
   b. force
   c. effect
   d. decreasing

IV. Choose a, b, or c, in each question below. Only one choice is correct. (1.5 points: 0.5 each)

   1. Ship operations in the Antarctic...
      a) have not varied since the late 1970s.
      b) do not depend on the amount of ice in the area.
      c) are not easy because the sea ice in the area has increased.

   2. Greenhouse gas emissions are estimated...
      a) to have contributed to the decrease of sea ice in the two polar regions
      b) to have contributed partly to the decrease of sea ice in the Arctic.
      c) to come from natural variability.

   3. Sea ice in the Antarctic has declined in extent...
      a) across the Ross Sea.
      b) in the west of the Peninsula.
      c) in the southern region.

Part B. Write a 130 to 150-word composition. (4 points)

   How is climate change affecting us?