

## LÍNGUA INGLESA

**INSTRUCTION: Answer questions 51 to 55 in relation to text 1.**

### TEXT 1

01 The agency has no official plans for a mission to the  
02 Jovian moon, whose icy crust covers a watery ocean in  
03 which life could theoretically exist. But spurred by intense  
04 congressional interest and several recent discoveries,  
05 NASA is seeking ideas for instruments that could fly on  
06 a mission to Europa.

07 The groundswell of enthusiasm is likely to be bolstered by  
08 the latest big news, reported on 7 September, that there  
09 may be giant plates of ice shuffling around on Europa  
10 – much as plates of rock do on Earth (S. A. Kattenhorn  
11 and L. M. Prockter *Nature Geosci.* 2014). Such active  
12 geology suggests that Europa's icy surface is connected  
13 to its buried ocean – creating a possible pathway for salts,  
14 minerals and maybe even microbes to get from the ocean  
15 to the surface and back again.

16 Kattenhorn and Prockter propose a system of plate  
17 tectonics that involves a shell of ice a few kilometers thick  
18 sliding around on warmer, more fluid ice. When one plate  
19 hits another and begins to dive downwards – or subduct  
20 – it melts and becomes incorporated in the underlying  
21 ice, the duo proposes.

22 Places have already been spotted on Europa where fresh  
23 ice crust is being born, but the latest research is the first  
24 to pinpoint where it might be going to die.

25 But without high-resolution images from more areas,  
26 researchers cannot tell whether subduction might also be  
27 happening in other locations. If it turns out to be common,  
28 it might mean that the moon could be cycling life-friendly  
29 compounds between the surface and the deep, and  
30 that substantially increases the chance that its ocean is  
31 habitable, says Michael Bland, a planetary scientist at the  
32 US Geological Survey in Flagstaff, Arizona.

33 The discovery adds to excitement set off in December,  
34 when scientists reported plumes of water vapour spurting  
35 out at Europa's south pole. The plumes have not been  
36 seen since, and they may or may not be related to  
37 Europa's newly appreciated system of plate tectonics.  
38 NASA now needs to figure out what kind of mission might  
39 best explore these discoveries.

Adapted from <http://www.scientificamerican.com/article>  
(acesso em setembro de 2014).

**INSTRUCTION: Answer question 51 based on statements I to III.**

- I. NASA is looking for ideas for instruments to research Europa.
- II. Researchers found that Europa's ocean is habitable.
- III. A system of plate tectonics on Europa's icy crust has been suggested.

**51) The correct statement(s) is/are**

- A) I, only.
- B) III, only.
- C) I and II, only.
- D) I and III, only.
- E) I, II, and III.

**52) According to the text,**

- A) Europa is friendly to human life.
- B) NASA is sending a mission to Europa soon.
- C) subduction is happening all over Europa's surface.
- D) the compounds of the ocean cause the ice movement.
- E) the system of plate tectonics could be related to the plumes of water vapour.

**53) In line 07, the word "bolstered" can be substituted, without change in meaning, by**

- A) reduced.
- B) retarded.
- C) suppressed.
- D) encouraged.
- E) dismissed.

**54) The "-ly" in "life-friendly" (line 28) performs the same grammar role as in**

- A) sisterly.
- B) gradually.
- C) recently.
- D) chiefly.
- E) gladly.

55) A frase "But without high-resolution images from more areas, researchers cannot tell whether subduction might also be happening in other locations" (linhas 25 a 27) poderia ser assim compreendida:

- A) More high-resolution images cannot show if subduction might happen in other areas.
- B) More high-resolution images can tell if subduction might be happening in other areas.
- C) More high-resolution images cannot show researchers where subduction areas might be.
- D) Without more high-resolution images, researchers can tell where subduction might be happening.
- E) Without more high-resolution images, researchers can be told if subduction might be happening in other areas.

**INSTRUCTION: Answer questions 56 to 60 according to text 2.**

### TEXT 2

01 Reading the work of Jorge Luis Borges for the first time is  
02 like discovering a new letter in the alphabet, or a new note in  
03 the musical scale. His writings are fictions filled with private  
04 jokes and esoterica, historiography and sardonic footnotes.  
05 They are brief, often with abrupt beginnings. Borges' use  
06 of labyrinths, mirrors, chess games and detective stories  
07 creates a complex intellectual landscape, yet his language is  
08 clear, with ironic undertones. He presents the most fantastic  
09 of scenes in simple terms, seducing us into the forking  
10 pathway of his seemingly infinite imagination.

11 Half a century ago, when Borges' ground-breaking collection  
12 *Ficciones* was first published in English translation, he was  
13 virtually unknown outside literary circles in Buenos Aires,  
14 where he was born in 1899, and Paris, where his work was  
15 translated in the 1950s. In 1961, he was catapulted onto the  
16 world stage when international publishers awarded him the  
17 first Formentor Prize for outstanding literary achievement.  
18 He shared the prize with Samuel Beckett (the other authors  
19 on the shortlist were Alejo Carpentier, Max Frisch and Henry  
20 Miller). The award spurred English translations of *Ficciones*  
21 and *Labyrinths* and brought Borges widespread fame and  
22 respect.

23 Over the decades since his death in 1986, Borges' global  
24 stature has continued to grow. "Today one could consider  
25 Borges the most important writer of the 20th Century," says  
26 Suzanne Jill Levine, translator and general editor of the  
27 Penguin Classics five-volume Borges series. Why? "Because  
28 he created a new literary continent between North and South  
29 America, between Europe and America, between old worlds  
30 and modernity. In creating the most original writing of his  
31 time, Borges taught us that nothing is new, that creation is  
32 recreation, that we are all one contradictory mind, connected  
33 amongst each other and through time and space, that human  
34 beings are not only fiction makers but are fictions themselves,  
35 that everything we think or perceive is fiction, that every  
36 corner of knowledge is a fiction."

Adapted from <http://www.bbc.com/culture/story/20140902-the-20th-century-best-writer> (acessado em setembro 2014).

56) The best title for this text would be:

- A) The ironic aspects of Borges' literary works
- B) The contradictory role of Borges in transcontinental literature
- C) Is Borges the 20<sup>th</sup> century most important writer?
- D) Are labyrinths and mirrors symbols of Borges' creativity?
- E) The most important 20<sup>th</sup> century writers and detective stories

57) The alternative which contains three words that play the same grammar role in the text is:

- A) "Reading" (line 01), "seducing" (line 09), "writing" (line 30)
- B) "discovering" (line 02), "seducing" (line 09), "forking" (line 09)
- C) "forking" (line 09), "ground-breaking" (line 11), "outstanding" (line 17)
- D) "seducing" (line 09), "ground-breaking" (line 11), "outstanding" (line 17)
- E) "outstanding" (line 17), "creating" (line 30), "writing" (line 30)

58) The best definition of the word "stature", as it is used in line 24, is:

- A) A person's natural height.
- B) A person in an upright position.
- C) The prominence of a person.
- D) The moral greatness of a person.
- E) The degree of development of a person.

59) A preposição "In" (linha 30) pode ser substituída, sem alteração de significado, por

- A) By
- B) For
- C) With
- D) Within
- E) Inside

60) The pronoun "themselves" (line 34) is used

- A) to replace the subject.
- B) to complement the verb "are".
- C) to refer to human beings taken in general.
- D) to emphasize the subject of the verb "are".
- E) to specify which human beings create fiction.