

PROVES D'ACCÉS A LA UNIVERSITAT

PRUEBAS DE ACCESO A LA UNIVERSIDAD

CONVOCATÒRIA: JUNY 2019	CONVOCATORIA: JUNIO 2019
Assignatura: ANGLÉS	Asignatura: INGLÉS

Please answer on a separate sheet of paper

OPCIÓ A/OPCIÓN A

Part A. Reading Comprehension

Read the following text:

GARBAGE COLLECTION IN SPACE

Space junk circling our planet is a growing problem as more spacecrafts are sent up into orbit, increasing the dangers of a collision. Some of the debris is natural, such as small portions of meteoroid, and some of it is artificial, such as the pieces of material leftover from old probes and rockets. It is estimated that there are more than 20,000 pieces of artificial debris each larger than a baseball floating around Earth, all traveling at tremendous speeds.

They travel up to 17,500 miles per hour, in fact, fast enough that a small nugget could wreck sensitive structures. Luckily, there haven't been many catastrophic crashes with cosmic garbage, but a few windows on space shuttles have had to be replaced due to damage caused by debris as small as bits of paint.

The European Commission has funded a number of projects promising to clean up space junk. The RemoveDEBRIS apparatus developed by researchers from Airbus and the University of Surrey in England is just one of them.

RemoveDEBRIS successfully caught a lump of space trash – specifically, a no longer needed small human made satellite – using a net. This mechanism is hoped to form the basis of future nets that will sweep up space litter around Earth, clearing the way for safer launches.

The next phase is to catch another human made satellite, but this time using cameras and LiDAR technology to target objects with better precision, and a special harpoon to capture them. A drag-sail will also bring the debris back into Earth's atmosphere to be destroyed.

Adapted from an article by Katyanna Quach, *The Register*, 19-09-2018

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 space garbage steadily increasing?
- b. What was RemoveDEBRIS able to do?

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. Only the largest pieces of debris can cause damage.
- b. Space debris has never crashed with space shuttles.
- c. RemoveDEBRIS is the result of research carried out by two partners.

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

dangers debris wreck sensitive sweep launches

- a. risks
- b. delicate
- c. clean
- d. damage

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

1. Meteoroids...

- a) leave natural debris.
- b) leave artificial debris.
- c) are usually larger than baseballs.

2. Debris runs so fast that very small pieces...

- a) cannot cause damage.
- b) can cause damage.
- c) are sensitive structures.

3. RemoveDEBRIS...

- a) was based on a human made satellite.
- b) was based on net technology.
- c) used a net and a harpoon to capture space trash.

Part B. Composition (130 to 150 words approximately) (4 points)

What can we do to reduce electronic waste?

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OPCIÓ B /OPCIÓN B

Part A. Reading Comprehension

Read the following text:

HARD DAY'S NIGHT: CAUSES OF SLEEP DEPRIVATION

Sleep deprivation can be torture, quite literally. After a week of being kept awake, a 19th-century Chinese merchant who had been sentenced to death by sleep deprivation was begging for “the opportunity of being strangled, guillotined, burned to death or drowned.”

If you want to know what it's like to suffer the horrors of sleep deprivation, try reducing the number of hours you sleep. But there is another way, much harder to detect and more common than we realise: sleep deprivation is not just about quantity, it is about quality, too.

There is no better illustration of the importance of sleep quality than narcolepsy, a sleep disorder I have lived with for half my life. When I was diagnosed in the 1990s, if I explained to someone I had narcolepsy I was met by an astonished stare. Nowadays, most people know it is a disabling neurological condition in which sleep strikes with little or no warning repeatedly through the day. The sleep of narcolepsy is not healthy, restorative sleep, but is seriously disturbed, shot through by hallucination-like dreams. Just as sleep repeatedly interferes with my ability to stay awake during the day, wakefulness very often intrudes on my sleep at night. Narcolepsy is about being simultaneously overslept and sleep-deprived.

A recent study showed that one of the strongest predictors of how rested you feel in the morning is sleep continuity. Anyone who's had children can testify to the psychological suffering that results from fractured sleep. It is pretty clear that the brain would rather not be disturbed.

Adapted from an article by Henry Nicholls, *The Guardian*, 10-02-2019

I. Answer the following questions using your own words but taking into account the information in the text. (2 points: 1 point each)

- a. What does the author mean by sleep quantity and quality?
- b. When can you say that you are rested in the morning?

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 Chinese merchant preferred fire to sleep deprivation.
- b. In the 1990s, people understood what narcolepsy was about.
- c. You feel full of energy if you have non-stop sleep through the night.

III. Find a synonym for each of the four words below from these six options. All words are underlined in the text (1 point: 0.25 each)

begging *illustration* *stare* *disabling* *wakefulness*
rested

- a. fixed look
- b. refreshed
- c. example
- d. incapacitating

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

1. In order to check how lack of sleep affects people...
 - a) we need to know more about dreams.
 - b) both quantity and quality of sleep have to be measured.
 - c) we should ask parents.
2. Narcolepsy...
 - a) takes place during the day.
 - b) allows you to have good sleep.
 - c) was a well-known disorder 3 decades ago.
3. The sleep of narcoleptics...
 - a) is good because they can also sleep in daytime.
 - b) is not reparative sleep.
 - c) doesn't allow them to dream.

Part B. Composition (130 to 150 words approximately) (4 points)

Do you get enough sleep every day?