

## **GRADUATE IN SECONDARY EDUCATION**

**OPEN TEST** 

## **COMMUNICATION SKILLS: ENGLISH**

2021

SURNAMES AND NAME: \_\_\_\_\_

SIGNATURE:

Donostia-San Sebastián, 1 - 01010 VITORIA-GASTEIZ Tef. 945 01 83 66 - Fax 945 01 83 36 - E-mail: <u>huiscesc@ej-qv.es</u>



### ADA LOVELACE The first computer programmer



'My daughter will never be a poet!' was Lady Byron's thought when her daughter was born.

Ada Lovelace, known today as the first computer programmer, was born Augusta Ada Byron in London, on December 10, 1815. Her parents, Anne Isabelle Milbanke, and the famous Romantic poet, Lord Byron, had a brief marriage. Lord Byron was handsome and brilliant, but also moody and intense. They separated a month after Ada's birth and the poet died when Ada was eight.

Lady Byron did her best to raise her daughter alone. She made sure Ada was taught math and science in hopes of preventing her from developing the mood swings and temper of her father. Fortunately, she belonged to the upper circles of London society and could afford an education for Ada. The little girl enjoyed gymnastics, dancing, and horseback riding. She learned to play the violin, the harp and the piano. In between these activities, she went to concerts and parties and she even met the Queen!

Ada was taught by Mary Somerville, a well-known researcher and scientific author, who introduced her to Charles Babbage in June 1833. Babbage, today considered the father of the computer, invented the analytical engines to perform mathematical calculations. These engines laid the groundwork for modern-day computation with computers.

Lovelace was tasked with translating one of Babbage's articles on the analytical engine from French to English. She not only translated the article, but also added her own notes and thoughts to it. Lovelace believed that the analytical engine could be used to process letters and symbols rather than numbers alone and she is credited with writing the first algorithm meant to be carried out by a computer.

Ada Lovelace received little to no acclaim for her ideas while she was alive. She died of cancer in 1852. Almost a century later, Lovelace's works were finally introduced back into the scientific sphere and nowadays she is often referred to as the Mother of Computer Programming. The computer language 'Ada', used in some aviation and military programs, is named after her.

Adapted from: Amazing women in HIstory: <u>LIV/U3OS</u>



### **Reading Comprehension (7 points)**

### 1. Choose the correct answer (2 points)

### a) Ada's father was famous for his

- A. poetry.
- B. bad temper.
- C. writings on medicine.
- D. invention of the computer.

### b) Ada's mother insisted on her learning math and science

- A. so that she could meet the Queen.
- B. to make sure she could become a Romantic poet.
- C. to prevent her from suffering mood swings like her father.
- D. to help her become one of the first computer programmers.

### c) Ada was introduced to Babbage when she was

- A. eighteen.
- B. nineteen.
- C. twenty-one.
- D. twenty-three.

### d) The order of the five paragraphs in the passage is

- A. Ada's Birth / Ada's Education / Ada's Legacy / Charles Babbage / Ada's Discoveries.
- B. Ada's Family / Ada's Education / Charles Babbage / Ada's Discoveries / Ada's Legacy.
- C. Ada's Education / Ada's Discoveries / Ada's Legacy / Charles Babbage / Ada's Future.
- D. Ada's Childhood / Ada's Discoveries / Charles Babbage / Ada's Legacy / Ada's Future.

# 2. Answer the following questions using information from the text and your own words, in full sentences. (2 points)

a) What did Lovelace think about the analytical engine?b) Why is Ada referred to as the Mother of Computer Programming?



### *3. -* Vocabulary. Find words in the text meaning the following: (1 point)

short	
changes	
basis	
included	
currently	

#### Read the text and choose the correct answer. (2 points)

### **COMPUTER PROGRAMMING**



The biggest names in technology want today's children to learn computer programming. (1) ...... stars, from the world of sport, entertainment, fashion, etc. also say kids need to learn to code. People like Facebook CEO Mark Zuckerberg and Microsoft founder Bill Gates have appeared in a video to tell children coding is (2) ...... Dropbox creator Drew Houston believes coding is like learning to play a musical instrument or playing a sport: "It starts out being very scary, but you kind of get the hang of it over (3) .....," he said.

Underline or circle the correct answer:

(1)	Other	Another	Others	Anothers
(2)	amused	fun	entertained	comical
(3)	minute	second	week	time
(4)	learns	animates	teaches	prepares
(5)	roles	properties	functions	powers



### 4.- Writing: (3 points) Write an answer to one of the questions below (80-100 words).

1. In your English class you have been talking about the importance of computer programming. As explained in the previous text, many famous people think coding should be taught in schools.



Now your English teacher wants you to write an essay about it. Do you agree or disagree with that opinion? What subjects do you think should be taught at school?

Write your opinion essay.

### 2. You see this announcement on a website:

### Articles wanted

### The most useful thing I have ever learned

What is the most useful thing you have ever learned? Who did you learn it from? Why is it useful?

Write an article answering these questions. We will publish the best articles on our website.

Thanks for your answer



Write your article.



**Remember:** the picture and questions above are just to help you generate ideas. Think and put your ideas in order before starting to write.