Practice IELTS Reading

You should spend about 20 minutes on **Questions 1-13**, *which are based on the passage below.*

A

With AI becoming incorporated into more aspects of everyday living, from writing to driving, it's only natural that artists would also start to experiment with artificial intelligence. Indeed, British auction house Christie's, just sold its first piece of AI art – a blurred face titled "Portrait of Edmond Belamy" – for $432,500. The event led many to question whether the final product can truly be considered a piece of art if artificial intelligence is used to create images. And, if so, given that the creative process still requires the input of an artist, at what point do they relinquish credit to the machine?

B

Over the last 50 years, several artists have written computer programs to generate art, also known as algorithmic art. It requires the artist to write detailed code with an actual visual outcome in mind. One the earliest practitioners of this form is Harold Cohen, who wrote the program AARON to produce drawings that followed a set of rules Cohen had created.

C

But the AI art that has emerged over the past couple of years incorporates machine learning technology. Artists create algorithms not to follow a set of rules, but to "learn" a specific aesthetic by analyzing thousands of images. The algorithm then tries to generate new images in adherence to the aesthetics it has learned. The piece sold at Christie's is part of this new wave of AI art created via machine learning. Paris-based artists Hugo Caselles-Dupré, Pierre Fautrel and Gauthier Vernier fed thousands of portraits into an algorithm, "teaching" it the aesthetics of past examples of portraiture. The algorithm then produced "Portrait of Edmond Belamy."

D

To create art in this way, the artist chooses a collection of images – in this case portraits - to feed the algorithm, a step known as "pre-curation." Most of the AI artworks that have emerged over the past few years have used a class of algorithms called "generative adversarial networks." First introduced by computer scientist Ian Goodfellow in 2014, these algorithms are called "adversarial" because there are two sides to them: One generates random images; the other has been taught, via the input, how to judge these images and deem which best align with the input

E

The generative algorithm can produce images that surprise even the artist presiding over the process. For example, a generative adversarial network being fed portraits could end up producing a series of deformed faces. What should we make of this? Psychologist Daniel E. Berlyne has studied the psychology of aesthetics for several decades. He found that novelty, surprise, complexity, ambiguity and eccentricity tend to be the most powerful stimuli in works of art.

Questions 1-7

*Which section of the text contains the following information? Choose the correct letter, **A-E**.*

You may choose any letter more than once.

1 a contrast between different types of AI techniques
2 a reference to an unintended outcome
3 examples of factors that create impressive art
4 the way a particular artwork was created
5 examples of AI in other areas of daily life
6 the reaction of some to the sale of an artwork
7 a definition of algorithmic art

Questions 8-10

*Look at the following statements and the list of people below. Match each statement with the correct person **A, B, C** or **D**.*

8 developed algorithms used to make most of the recent AI art
9 researched the mind's reaction to art
10 developed a computer program to create art according to his vision

    A Harold Cohen
    B Ian Goodfellow
    C Pierre Fautrel
    D Daniel E. Berlyne

Questions 11-12

*Complete the notes below. Choose **NO MORE THAN TWO WORDS** from the passage for each answer.*

11 In a generative adversarial network, one algorithm has to create images, and the other has to ………….. them.

12 An algorithm trained on portraits could create a set of ………….. .

Question 13

Choose the correct letter, **A, B, C or** D.

13 What is the best heading for this passage?

    A Changing attitudes to aesthetics
    B Limitations of AI in art
    C Advances in algorithmic art
    D Artists who changes the world