

## READING

The Reading part consists of five tasks. Task 1 assesses your ability to read a longer text in order to identify the main idea, opinion, purpose and find specific information. Tasks 2–4 focus on comprehension across three texts of different genres which discuss the same topic. They assess your ability to understand and compare information across texts, read for detailed understanding, opinion and attitude, as well as draw inferences. Task 5 tests your ability to understand details and the main ideas and draw the necessary information from the text based on its context. You have 60 minutes to complete the tasks.

### Task 1 (8 points)

*You and your friend are making a presentation about future jobs. Your friend has researched an article 'Automation is making human labor more valuable than ever' and started to write out the main points. Read the article and circle the correct option (A, B, C or D) to finish what your friend has started. The answers must be based on the text.*

#### AUTOMATION AND HUMAN LABOR

Because the present economy is based on automation, it's only logical to believe that the future will be shaped by it as well. Every week, it seems like a new research or opinion article is published regarding the job-killing potential of robotics and artificial intelligence. However, our collective fixation with job-stealing robots may lead us to overestimate the extent of automation's influence. Human labor is considered a signal of luxury in many service businesses. As a result, demand for labor-intensive services is increasing at the same time that robots are destroying manufacturing jobs.

Signs of this can be found all around us. There's Etsy, an online marketplace whose key selling point is that its items aren't mass-produced. Restaurants featuring organic, locally sourced products, frequently from smaller, less automated farms, are on the rise. These are all cases where greater automation is technologically possible, but companies are using their lack of automation as a selling point. They're doing this because customers like the feeling of a personal connection to the farmers, brewers, and artisans who make the products they're buying.

In coffee shops, inefficiency is seen as a sign of wealth. Because of that there is an ongoing trend for baristas to take their time when making coffee. "Amid customer complaints that the Seattle-based coffee chain has reduced the fine art of coffee making to a mechanised process with all the romance of an assembly line, Starbucks baristas are being told to stop making multiple drinks at the same time". A Starbucks barista in Minnesota griped that the new rules had "doubled the amount of time it takes to make drinks in some cases." This isn't only bad for the workers; it may also be inconvenient for customers by causing longer, slower queues.

But Starbucks management came to an important realization about their business: Customers don't go to Starbucks just to get a cup of coffee – in the end, there are lots of cheaper and faster ways to get the beloved drink. People go to Starbucks because they enjoy the experience. And that experience has a crucial performative dimension. They want to feel as if their barista gave their cup a special attention.

And Starbucks isn't even the fanciest of coffee shops in town. Serious coffee snobs prefer visiting boutique coffee shops that provide exotic fair-trade beans. The process of making coffee at these stores is often even more elaborate and labor-intensive than at Starbucks. And because these shops are often smaller and don't have the Starbucks brand pulling in customers, baristas tend to serve fewer customers – resulting in higher prices.

But a lot of coffee lovers are not bothered by it. They believe that finely prepared artisanal coffee is superior to mass-market coffee and are willing to pay top dollar for it. This helps to explain why there continues to be a big market for people to make coffee.

Coffee is not the most important industry in the United States. However, comparable trends may be observed over huge areas of the American economy. One way to see this is by looking at the US Labor Department's projections of the fastest-growing occupations in the United States between 2014 and 2024. A bunch of slots are taken up by therapists and caretakers: physical therapists and their aides and assistants, occupational therapy aides and assistants, home health aides. In some cases, growing demand is driven by an aging population with greater need for personal care. But that's not the whole story.

In a sense, it's possible to automate many aspects of these jobs. Instead of having a therapist come to your home, someone could send you a video demonstrating therapy techniques. A website could ask the patient questions and recommend exercises. If these resources proved insufficient, the patient could hop onto a videoconferencing app for some personal advice.

For someone in need of assistance, this type of semi-automated therapeutic service is undoubtedly preferable to nothing. But it's a lot worse than having a face-to-face meeting with a human being who gives you their undivided attention.

Indeed, talking about "automating" this kind of job seems like a category error. "Therapy" delivered by an app or even a robot is a different kind of service, just as coffee delivered by a vending machine is a different kind of service than a cup of coffee prepared by a human barista. Over time, technological advancements have slowly extracted inefficiencies from manufacturing processes. However, in some industries talking to other people will always be of crucial value.

(Based on: Lee, Timothy B. *Automation is making human labor more valuable than ever* [online]. 2016, September 26. Available at: <https://www.vox.com/a/new-economy-future/manual-labor-luxury-good>)

1. The consequences of the automation of jobs can be described as being
  - A correctly evaluated by people.
  - B played down by people.
  - C exaggerated by people.
  - D ignored by people.
2. Companies are using manual labor because
  - A it is rather costly to automate jobs in coffee shops.
  - B it gives an advantage over regular coffee shops.
  - C it increases the efficiency of coffee shops.
  - D it is uncommon to use machines in coffee shops.
3. Some people who work in coffee shops
  - A are not excited by the new coffee making process.
  - B take their time making a cup of coffee without complaining.
  - C miss the time before the process was mechanized.
  - D think that making only one cup a time is beneficial.
4. People choose to go to coffee shops like Starbucks
  - A to get the fastest service.
  - B to get a better quality coffee.
  - C to connect with other visitors.
  - D to feel important and cared for.
5. In the USA many future professions are predicted to be
  - A connected with the growing demand of technologies.
  - B jobs that require heavy manual labor.
  - C occupations that require looking after people.
  - D in the ever-growing catering industry.
6. The automation of jobs
  - A is beneficial for the customers.
  - B seems inappropriate in some spheres.
  - C does not change the service you receive.
  - D is the best solution for everyone.
7. The author's aim is to
  - A provide the readers with all of the benefits of automation.
  - B give the readers a warning about the future of automation.
  - C persuade the readers to trust the process of automation.
  - D explain to the readers the real-life implications of automation.
8. The author of the article would probably agree that
  - A the automation of jobs is highly beneficial.
  - B the automation of jobs is likely to be unnecessary.
  - C the automation of jobs requires too many resources.
  - D the automation of jobs could be problematic.

For Tasks 2–5, read the three texts (A, B and C) discussing different aspects of music.

## MUSIC

### TEXT A

It will be generally admitted that Beethoven's Fifth Symphony is the most sublime noise that has ever penetrated into the ear of man. All sorts and conditions are satisfied by it. Whether you are like Mrs. Munt, and tap surreptitiously when the tunes come—of course, not so as to disturb the others—or like Helen, who can see heroes and shipwrecks in the music's flood; or like Margaret, who can only see the music; or like Tibby, who is profoundly versed in counterpoint, and holds the full score open on his knee; or like their cousin, Fraulein Mosebach, who remembers all the time that Beethoven is *echt Deutsch*; or like Fraulein Mosebach's young man, who can remember nothing but Fraulein Mosebach: in any case, the passion of your life becomes more vivid, and you are bound to admit that such a noise is cheap at two shillings. It is cheap, even if you hear it in the Queen's Hall, dreariest music-room in London, though not as dreary as the Free Trade Hall, Manchester; and even if you sit on the extreme left of that hall, so that the brass bumps at you before the rest of the orchestra arrives, it is still cheap.

"Whom is Margaret talking to?" said Mrs. Munt, at the conclusion of the first movement. She was again in London on a visit to Wickham Place.

Helen looked down the long line of their party, and said that she did not know.

"Would it be some young man or other whom she takes an interest in?"

"I expect so," Helen replied. Music enwrapped her, and she could not enter into the distinction that divides young men whom one takes an interest in from young men whom one knows.

"You girls are so wonderful in always having—Oh dear! one mustn't talk."

For the Andante had begun—very beautiful, but bearing a family likeness to all the other beautiful Andantes that Beethoven had written, and, to Helen's mind, rather disconnecting the heroes and shipwrecks of the first movement from the heroes and goblins of the third. She heard the tune through once, and then her attention wandered, and she gazed at the audience, or the organ, or the architecture. Much did she censure the attenuated Cupids who encircle the ceiling of the Queen's Hall, inclining each to each with vapid gesture, and clad in sallow pantaloons, on which the October sunlight struck. "How awful to marry a man like those Cupids!" thought Helen. Here Beethoven started decorating his tune, so she heard him through once more, and then she smiled at her Cousin Frieda. But Frieda, listening to Classical Music, could not respond. Herr Liesecke, too, looked as if wild horses could not make him inattentive; there were lines across his forehead, his lips were parted, his *pince-nez* at right angles to his nose, and he had laid a thick, white hand on either knee. And next to her was Aunt Juley, so British, and wanting to tap. How interesting that row of people was! What diverse influences had gone to the making! Here Beethoven, after humming and hawing with great sweetness, said "Heigho," and the Andante came to an end. Applause, and a round of "wunderschoning" and *pracht* volleying from the German contingent. Margaret started talking to her new young man; Helen said to her aunt: "Now comes the wonderful movement: first of all the goblins, and then a trio of elephants dancing"; and Tibby implored the company generally to look out for the transitional passage on the drum.

(from 'Howards End' by E. M. Forster, 1910)

### TEXT B

'Earworm melodies with strange aspects' – what happens when AI makes music

12 January 2018 by Kevin Casey

*The first full-length mainstream music album co-written with the help of artificial intelligence (AI) was released on 12 January, 2018, and experts believe that the science behind it could lead to a whole new style of music composition.*

Popular music has always been fertile ground for technological innovation. From the electric guitar to the studio desk, laptops and the wah-wah pedal, music has the ability to absorb new inventions with ease. Now, the release of *Hello World*, the first entire studio album co-created by artists and AI could mark a watershed in music composition.

Stemming from the FlowMachines project, funded by the EU's European Research Council, the album is the fruits of the labour of 15 artists, music producer Benoit Carré, aka Skyyge, and creative software designed by computer scientist and AI expert François Pachet. Already Belgian pop sensation Stromae and chart-topping Canadian chanteuse Kiesza have been making waves with the single *Hello Shadow*.

The software works by using neural networks – artificial intelligence systems that learn from experience by forming connections over time, thereby mimicking the biological networks of people's brains. Pachet describes its basic job as 'to infer the style of a corpus (of music) and generate new things'. A musician firstly provides 'inspiration' to the software by exposing it to a collection of songs. Once the system understands the style required it outputs a new composition. 'The system ... analyses the music in terms of beats, melody and harmony,' said Pachet, 'And then outputs an original piece of music based on that style.'

The design challenge with this software was to make it adapt to the creative workflow of musicians without becoming a nuisance. 'The core problem was how to do that so that it takes into account user constraints. Why? Because if you compose music, actually you never do something from scratch from A to Z,' said Pachet. He outlines a typical scenario where the AI software generates something and only parts of it are useful but the musician wants to keep it in, drop the rest and generate new sounds using the previous partial output. It's a complex requirement, in other words.

'Basically, the main contribution of the project was to find ways to do that, to do that well and to do that fast,' said Pachet. 'It was really an algorithmic problem.' As creative workers driven by intuition, musicians need direct results to maintain their momentum. A clunky tool with ambivalent results would not last long in a creative workflow. Pachet is satisfied that his technical goal is completed and that the AI will generate music 'quickly and under user constraints'.

After years of development and refinement, the AI music tool now fits on a laptop, such as to be found in any recording studio, anywhere. In the hands of music producer Carré, the application became the creative tool that built *Hello World*.

Adapted from "Earworm melodies with strange aspects" – what happens when AI makes music by Kevin Casey available at <https://ec.europa.eu/research-and-innovation/en/horizon-magazine/earworm-melodies-strange-aspects-what-happens-when-ai-makes-music>

This article was originally published in Horizon, the EU Research and Innovation magazine, used under CC-BY 4.0.

## TEXT C

"Music" is one of the most difficult terms to define, partially because beliefs about music have changed dramatically over time just in Western culture alone. If we look at music in different parts of the world, we find even more variations and ideas about what music is. Definitions range from practical and theoretical (the Greeks, for example, defined music as "tones ordered horizontally as melodies and vertically as harmony") to quite philosophical (according to philosopher Jacques Attali, music is a sonorous event between noise and silence, and according to Heidegger, music is something in which truth has set itself to work). There are also the social aspects of music to consider. As musicologist Charles Seeger notes, "Music is a system of communication involving structured sounds produced by members of a community that communicate with other members" (1992, p.89). Ethnomusicologist John Blacking declares that "we can go further to say that music is sound that is humanly patterned or organized" (1973), covering all of the bases with a very broad stroke. Some theorists even believe that there can be no universal definition of music because it is so culturally specific.

Although we may find it hard to imagine, many cultures, such as those found in the countries of Africa or among some indigenous groups, don't have a word for music. Instead, the relationship of music and dance to everyday life is so close that the people have no need to conceptually separate the two. According to the ethnomusicologist Bruno Nettl (2001), some North American Indian languages have no word for "music" as distinct from the word "song." Flute melodies too are labeled as "songs." The Hausa people of Nigeria have an extraordinarily rich vocabulary for discourse about music, but no single word for music. The Basongye of Zaire have a broad conception of what music is, but no corresponding term. To the Basongye, music is a purely and specifically human product. For them, when you are content, you sing, and when you are angry, you make noise (2001). The Kpelle people of Liberia have one word, "sang," to describe a movement that is danced well (Stone, 1998, p. 7). Some cultures favor certain aspects of music. Indian classical music, for example, does not contain harmony, but only the three textures of a melody, rhythm, and a drone. However, Indian musicians more than make up for a lack of harmony with complex melodies and rhythms not possible in the West due to the inclusion of harmony (chord progressions), which require less complex melodies and rhythms.

Although the exact definition of music varies widely even in the West, music contains melody, harmony, rhythm, timbre, pitch, silence, and form or structure. What we know about music so far...

- Music is comprised of sound.
- Music is made up of both sounds and silences.
- Music is *intentionally* made art.
- Music is humanly organized sound (Bakan, 2011).

A working definition of music for our purposes might be as follows: music is an intentionally organized art form whose medium is sound and silence, with core elements of pitch (melody and harmony), rhythm (meter, tempo, and articulation), dynamics, and the qualities of timbre and texture.

(Based on: Sarrazin, Natalie (2016). *Music and the Child* [online]. Available at <https://open.umn.edu/opentextbooks/textbooks/283> Open SUNY, used under CC BY-NC-SA)

### Task 2 (7 points)

Decide which text (A, B and C) each question refers to. Write the corresponding letter (A, B or C) next to the question. You can use each letter more than once.

Which text

1.	seeks to explore a concept?	
2.	would be most useful for someone considering new approaches to writing music?	
3.	illustrates the potential of music to evoke different reactions?	
4.	describes a problem-solving process?	
5.	discusses music as a reflection of society?	
6.	contrasts personal responses to music?	
7.	implies that music and language are connected?	

### Task 3 (1 point)

Which sentence best summarizes the idea that can be inferred from the three texts? Circle the correct answer.

- A People from different cultures might have a different emotional response to music.
- B Classical music is likely to become obsolete due to new approaches to music composition.
- C Music is a universal means of expression that has entered various areas of people's lives.

### Task 4 (4 points)

Tick (V) four (4) conclusions that can be drawn from the three texts (A, B and C).

A	Western cultures agree on a shared definition of music.	
B	Helen seems to be less engaged in the music during the Andante.	
C	The shortcomings of using AI in music production are difficult to overcome, delaying its introduction.	
D	Some cultures merge the concept of music with related activities.	
E	The use of harmony in music is universal.	
F	Scientists are sceptical about the implementation of AI in the music industry.	
G	The AI developers came up with a viable tool that supports the creative process.	
H	The performance of Beethoven's Symphony No. 5 was accompanied by a ballet.	
I	A limitation on the use of AI in composing music is the nature of the creative process.	

**Task 5 (5 points)**

The extract below contains information from texts A, B and C. Complete it with the exact words or phrases (maximum 4 words) from the texts (A, B and C). Write the word or phrase in the gap.

Music represents an enjoyable activity in and of itself, but its influence goes beyond simple amusement. Some researchers tend to stress the practical aspect of music, seeing it as a means of (1)\_\_\_\_\_ (Seeger, 1992:89). At the same time, music can provide a peak emotional experience. For example, in his renowned novel 'Howards End' Forster refers to Beethoven's Fifth Symphony as (2)\_\_\_\_\_ that people have ever encountered and endows it with the power to create (3)\_\_\_\_\_ imagery. While most cultures consider music to be a uniquely (4)\_\_\_\_\_ , the release of Hello World, the first AI-assisted album, once again proved that music has the ability to embrace (5)\_\_\_\_\_ .