PAU Practice Examination (Catalunya)

Computer Impact!

In 1996, the world champion Grand Master Gary Kasparov played chess against the computer program Deep Blue. They played six games; Kasparov won four and Deep Blue won two. Nowadays, a computer would easily beat the current chess world champion, Magnus Carlsen. The same type of thing has happened in other strategy board games for two players, such as Go.

So how does it work? It’s not that the computer thinks like a human player, it thinks better. A computer’s decision-making process is completely different. Computers don’t get tired and they have massive processing power, so when playing chess, the computer software is able to find the best move by an exhaustive analysis of all the possibilities. While the human player has to make use of intuition and pattern recognition, the computer can quickly calculate every possible option in a way that no human brain could ever hope to do. Because it operates in this way, the computer sometimes comes up with an astonishing move which even a chess grand master would never have considered. This move is not only unexpected, it is also extremely good, so human players can learn from it and in future, use it themselves. In other words, the computer’s different perspective has given the human players a new idea, an insight that they might never have obtained without the computer’s help.

And now, perhaps something similar is beginning to happen in the music industry. Traditionally, in order to identify new talent, big music companies have relied on people with “golden ears”, who are good at detecting new singers who might become extremely popular. These human experts use their intuition and experience to find tomorrow’s pop stars. But increasingly, the music companies are starting to use computerised analysis to do this job. Advances in home computing have made it possible for almost anybody to make high-quality recordings without the expense of recording studios and highly paid producers. At the same time, these home-made recordings can be uploaded to sites like YouTube. Now it’s possible for the music companies to find out how many people have been listening to this new music, to analyse all the Internet data and to discover which of these unknown singers is becoming “hot”.

Sometimes, the data points to an artist that the human experts would never have considered. “The other day we were listening to this rap artist and, you know, she seemed pretty awful really,” comments one music business executive. “But at the same time, the numbers she was getting were fantastic. And because of those statistics, we had to start taking her seriously …. And then as we went on listening we started to think, ‘Hey, actually this lady has got something – maybe it’s not what we thought we were looking for, but actually she’s really good’…. ”

The reality is that nobody knows what humans were missing before we had computers – and that applies to music as much as chess.

massive: enorme
astonishing: sorprenent, desconcertant / asombroso, desconcertante
insight: percepció / percepción
expense: despesa / gasto
data: informació / información
hot: de moda
PART 1: Reading comprehension
Choose the best answer according to the text. Only ONE answer is correct.
[3 points: 0.375 points for each correct answer. Wrong answers will be penalized by deducting 0.125 points. There is no penalty for unanswered questions.]

1. According to the passage,
   a) Kasparov became world chess champion by beating Deep Blue.
   b) Magnus Carlsen is not as good as Kasparov used to be.
   c) no one should expect a human player to beat a computer today.
   d) the computer can now beat humans at chess, but not at Go.

2. The computer
   a) thinks in the same way as a grand master, but much quicker.
   b) has better intuition and pattern recognition than a human.
   c) wins because it astonishes the human player.
   d) can consider every possible move in the game.

3. By playing chess, computers
   a) are helping players to improve their chess.
   b) usually only play unexpected moves.
   c) produce new ideas that even grand masters can’t understand.
   d) will teach humans how to think and process like a computer.

4. According to the passage,
   a) the music industry has a lot of similarities with chess.
   b) the music industry can learn a lot from chess.
   c) now more than ever, music companies need people to find talented new singers.
   d) experts with “golden ears” often discovered new musicians.

5. Which statement is true regarding the music industry?
   a) There are more pop stars today thanks to advances in home computing.
   b) The recordings people make at home can never be as good as the recordings made in a studio.
   c) Music companies prefer new singers to use a professional producer.
   d) It is much easier to publish music than it used to be.

6. Internet data on music videos
   a) is used to confirm what human experts think.
   b) is sometimes different to what human experts think.
   c) can be difficult to analyse.
   d) is used by unknown singers to promote their music.

7. The executive thought the rap artist
   a) would be successful as soon as he listened to her.
   b) would be successful because she was starting to make money.
   c) wasn’t very good at first, but then he changed his mind.
   d) should be taken seriously even though not many people were listening to her.

8. Which is the best summary of the text?
   a) Computers can help us to play better chess.
   b) Computers can surprise humans with new ideas.
   c) Computers are changing our world in ways that we don’t yet fully understand.
   d) Computers are finding new talent in chess and in music.
PART 2: Writing

Choose ONE topic. Write about number 1 or 2. Minimum length: 100 words. [4 points]

1. Computers are used to select candidates for job interviews. Do you think this is a good thing? Write an opinion essay.

2. Write an essay about the advantages and disadvantages of participating in online games.
Answers
1. c
2. d
3. a
4. d
5. d
6. b
7. c
8. b