

Această secțiune se completează de către candidat. Se vor utiliza doar majuscule de tipar.

Nume și Prenume (cu inițiala / inițialele tatălui, așa cum se regăsesc în catalog)

CNP

Facultatea de

Specializarea (dacă este cazul se va menționa IDD)

Anul de Studiu

Linia de studiu

Această secțiune se completează de către examinator.

	CITIRE	SCRIERE	VORBIRE	ASCULTARE	CALIFICATIV GENERAL
Nota obținută (în cifre)					
Echivalent nivel cf. CEFR					

GRADUATION TEST OF ENGLISH

PART I LISTENING (15 MINUTES)

(10 POINTS)

Exercise 1

(3 points, 0,5 × 6)

You will hear three different extracts. For questions 1-6, choose the answer (A, B or C) which fits best according to what you hear. There are two questions for each extract and you will hear each extract twice.

Extract One

You hear two friends talking about online privacy.

- 1 Why does the man mention his uncle?
 - a to criticise his attitude to technology
 - b to challenge a recommendation made by the woman
 - c to illustrate the power of the media
- 2 They agree that modern technology
 - a makes little difference to the accessibility of personal information.
 - b is less invasive than some people suggest.
 - c will continue to reduce people's privacy.

Extract Two

You hear part of a radio program in which two people are talking about computer games.

- 3 What is the woman's attitude towards computer games?
 - a She dislikes their lack of social interaction.
 - b She is concerned about their complexity.
 - c She regrets their increasing popularity.
- 4 What do the speakers agree about?
 - a There is a nostalgia for board games of the past.
 - b Computer games reflect the demands of modern society.
 - c It is important for people to play games they can learn from.

Extract Three

You hear two archaeologists talking about the role of technology in preserving the past.

- 5 What is the woman doing?
 - a explaining how technology has developed over time
 - b complaining about the complexities of current technology
 - c correcting a widely held view about technology
- 6 What do both speakers think about preserving the past?
 - a It is harder to pass on information about the present than the past.
 - b The effect of history on future is hard to determine.
 - c Facts about the past are becoming harder to identify.

Exercise 2

(7 points, 1 × 7)

You will hear the beginning of an interview in which a university professor talks about the robot he has designed, called Jeremy. For questions 1-7, complete the sentences with a word or short phrase.

In the trials, Jeremy had to find his way round a complicated **1** without problems.

He believes that making robots will help researchers to understand **2** itself.

Researchers decided to use the model of ants, whose **3** are adequate for their needs.

Jeremy has a **4** attached on top of him.

Professor Shepherd compares giving Jeremy rewards and punishments with **5**.

Professor Shepherd describes his use of the terms 'reward' and 'punishment' as a kind of **6**.

He gives the example of a robotic **7** to show how far domestic robots have developed.

TEXT A

Read the text below and solve the exercises that follow.

DAWN OF THE ROBOTS

They are already here - driving cars, vacuuming carpets and feeding hospital patients. They may not be walking, talking, human-like sentient beings, but they are clever ... and a little creepy.

- A** At first sight it looked like a typical suburban road accident. A Land Rover approached a Chevy Tahoe estate car that had stopped at a kerb; the Land Rover pulled out and tried to pass the Tahoe just as it started off again. There was a crack of fenders and the sound of paintwork being scraped, the kind of minor mishap that occurs on roads thousands of times every day. Normally drivers get out, gesticulate, exchange insurance details and then drive off. But not on this occasion. No one got out of the cars for the simple reason that they had no humans inside them; the Tahoe and Land Rover were being controlled by computers competing in November's DARPA (the U.S. Defence Advanced Research Projects Agency) Urban challenge.
- B** The idea that machines could perform to such standards is startling. Driving is a complex task that takes humans a long time to perfect. Yet here, each car had its on-board computer loaded with a digital map and route plans, and was instructed to negotiate busy roads; differentiate between pedestrians and stationary objects; determine whether other vehicles were parked or moving off; and handle various parking manoeuvres, which robots turn out to be unexpectedly adept at. Even more striking was the fact that the collision between the robot Land Rover, built by researchers at the Massachusetts Institute of Technology, and the Tahoe, fitted out by Cornell University Artificial Intelligence (AI) experts, was the only scrape in the entire competition. Yet only three years earlier, at DARPA's previous driverless car race, every robot competitor - directed to navigate across a stretch of open desert - either crashed or seized up before getting near the finishing line.
- C** It is a remarkable transition that has clear implications for the car of the future. More importantly, it demonstrates how robotics sciences and Artificial Intelligence have progressed in the past few years - a point stressed by Bill Gates, the Microsoft boss who is a convert to these causes. 'The robotics industry is developing much the same way the computer business did 30 years ago,' he argues. As he points out, electronics companies make toys that mimic pets and children with increasing sophistication. It can envision a future in which 'robotic devices will become a nearly ubiquitous part of our day-to-day lives', says Gates. 'We may be on the verge of a new era, when the PC will get up off the desktop and allow us to see, hear, touch and manipulate objects in places where we are not physically present.'
- D** What is the potential for robots and computers in the near future? The fact is we still have a way to go before real robots catch up with their science fiction counterparts, Gates says.
- So what are the stumbling blocks? One key difficulty is getting robots to know their place. This has nothing to do with class or etiquette, but concerns the simple issue of positioning. Humans orient themselves with other objects in a room very easily. Robots find the task almost impossible. 'Even something as simple as telling the difference between an open door and a window can be tricky for a robot,' says Gates. This has, until recently, reduced robots to fairly static and cumbersome roles.
- E** For a long time, researchers tried to get round the problem of attempting to re-create the visual processing that goes on in the human cortex. However, that challenge has proved to be singularly extracting and complex. So scientists have turned to simpler alternatives: 'We have become far more pragmatic in our work,' says Nello Crisianini, Professor of Artificial Intelligence at the University of Bristol in England and associate editor of the Journal of Artificial Intelligence Research. 'We are no longer trying to re-create human functions. Instead, we are looking for simpler solutions with basic electronic sensors, for example. This approach is exemplified by vacuuming robots such as the Electrolux Trilobite. The Trilobite scuttles around homes emitting ultrasound signals to create maps of rooms, which are remembered for future cleaning. Technology like this is now changing the face of robotics,' says philosopher Ron Chrisley, director of the Centre for Research in Cognitive Science at the University of Sussex in England.
- F** Last year, a new Hong Kong restaurant, Robot Kitchen opened with a couple of sensor-laden humanoid machines directing customers to their seats. Each possesses a touch-screen on which orders can be keyed in. The robot then returns with the correct dishes. In Japan, University of Tokyo researchers recently unveiled a kitchen 'android' that could wash dishes, pour tea, and make a few limited meals. The ultimate aim is to provide robot home helpers for the sick and the elderly, a key concerns in a country like Japan where 22 per cent of the population is 65 or older. Over US \$1 billion a year is spent on research into robots that will be able to care for the elderly. 'Robots first learn basic competence - how to move around a house without bumping into things. Then we can think about teaching them how to interact with humans,' Chrisley said. Machines such as these take researchers into the field of socialised robotics: how to make robots act in a way that does not scare or offend individuals. 'We need to study how robots should approach people, how they should appear. That is going to be a key area for future research,' adds Chrisley.

Exercise 1

(3 points, 0,5 × 6)

From the list of headings (1-9) below, choose the most suitable for each paragraph. Write the appropriate numbers (1-10) in boxes A-G below.

- 1 Tackling the Issue using a different approach
- 2 A significant improvement on last time

- 3 How robots can save human lives
- 4 Examples of robots at work
- 5 Not what it seemed to be
- 6 Why timescales are impossible to predict
- 7 The reason why robots rarely move
- 8 Following the pattern of an earlier development
- 9 The ethical issues of robotics

A	
B	
C	
D	
E	
F	

Exercise 2

(2,5 points, 0,5 × 5)

Look at the following people and the list of statements below. Match each statement with the correct person.

- | | | | | | |
|---|-------------------|---|--|---|--|
| | 1 | An important concern for scientists is to ensure that robots do not seem frightening. | 1 | | |
| A | Bill Gates | 2 | We have stopped trying to enable robots to perceive objects as humans do. | 2 | |
| B | Nello Cristianini | 3 | It will take considerable time for modern robots to match the ones we have created in films and books. | 3 | |
| C | Ron Chrisley | 4 | We need to enable robots to move freely before we can think about trying to communicate with them. | 4 | |
| | | 5 | New developments in robotics are reshaping the way we will interact with our computer and the environment. | 5 | |

Exercise 3

(1,5 points, 0,5 × 3)

Complete the notes below. Choose NO MORE THAN THREE WORDS from the text for each answer.**Robot features.**DARPA race cars: **1** provides map and plans for route.Electrolux Trilobite: builds an image of a room by sending out **2**Robot Kitchen humanoids: have **3** to take orders.**TEXT B**

(3 points, 0,3 × 10)

Read the text and fill in the blanks with the following words / phrases: *orderly, connections, consolidate, spreadsheet or database, aggregated, sizeable, data sets, queries, files, tabular***Taming data**

The age of big data has seen a host of new technologies for analyzing large **1**. But before any of those techniques can be applied, the target data has to be **2**, organised and cleaned up. That turns out to be a shockingly time-consuming task. In a 2016 survey, 80 data scientists told the company CrowdFinder that, on average, they spent 80 percent of their time collecting and organizing data and only 20 percent analyzing it.

An international team of computer scientists hopes to change that with a new system called Data Civilizer, which automatically finds **3** among many different data tables and allows users to perform database-style **4** across all of them. The results of the queries can then be saved as new, **5** data sets that may draw information from dozens or even thousands of different tables.

"Modern organizations have many thousands of data sets spread across **6**, spreadsheets, databases, data lakes, and other software systems," says Sam Madden an MIT professor of electrical engineering and computer science and faculty director of MIT's bigdata@CSAIL initiative. "Civilizers helps analysts in these organizations quickly find data sets that contain information that is relevant to them and, more importantly, combine related data sets together to create new, unified data sets that **7** data of interest for some analysis."

Data Civilizer assumes that the data it's consolidating is arranged in tables. As Madden explains, in the database community, there's a **8** literature on automatically converting data to **9** form, so that wasn't the focus of the new research. Similarly, while the prototype of the system can extract tabular data from several different types of files, getting it to work with every conceivable **10** program was not the researcher's immediate priority. "That part is engineering," Madden says.

PART III WRITING (35 MINUTES)

(10 POINTS)

Choose ONE of the following topics. Write the letter associated with the topic chosen by you in the appropriate box. Use only the space provided below.

A *The internet has caused people to be isolated from their real lives.* Do you agree or disagree?

B *„Technology brings you great gifts with the one hand and it stabs you in the back with the other.”* Discuss.

C You have seen the following job advertisement in a student magazine:

We are looking for young, talented individuals to join our dynamic team of software developers at Brown & Co. Ideal candidates should possess solid programming skills in either Java or C++, be program- and goal-oriented, with good communication skills in English, able to work both individually as well as in a team, with a 'can-do' attitude.

Write your application in response to the job advertisement.

Topic chosen:	
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