BACCALAUREÅT GÉNÉRAL
Session 2016

ANGLAIS
Langue Vivante 1

Durée de l’épreuve : **3 heures**

Séries ES/S – coefficient : 3
Série L langue vivante obligatoire (LVO) – coefficient : 4
Série L LVO et langue vivante approfondie (LVA) – coefficient : 8

L’usage de la calculatrice et du dictionnaire n’est pas autorisé.

Ce sujet comporte 6 pages numérotées de 1/6 à 6/6.
Dès que ce sujet vous est remis, assurez-vous qu’il est complet.

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Mrs. Weston waited patiently for two minutes, then impatiently for two more, and finally broke the silence.

‘George!’

‘Hmph?’

‘George, I say! Will you put down that paper and look at me?’

The paper rustled to the floor and Weston turned a weary face toward his wife, ‘What is it, dear?’

‘You know what it is, George. It’s Gloria and that terrible machine.’

‘What terrible machine?’

‘Now don’t pretend you don’t know what I’m talking about. It’s that robot Gloria calls Robbie. He doesn’t leave her for a moment.’

‘Well, why should he? He’s not supposed to. And he certainly isn’t a terrible machine. He’s the best darn robot money can buy and I’m damned sure he set me back half a year’s income. He’s worth it, though – darn sight cleverer than half my office staff.’

He made a move to pick up the paper again, but his wife was quicker and snatched it away.

‘You listen to me, George. I won’t have my daughter entrusted to a machine – and I don’t care how clever it is. It has no soul, and no one knows what it may be thinking. A child just isn’t made to be guarded by a thing of metal.’

Weston frowned, ‘When did you decide this? He’s been with Gloria two years now and I haven’t seen you worry till now.’

‘It was different at first. It was a novelty; it took a load off me, and – and it was a fashionable thing to do. But now I don’t know. The neighbors—’

‘Well, what have the neighbors to do with it? Now, look. A robot is infinitely more to be trusted than a human nursemaid. Robbie was constructed for only one purpose really – to be the companion of a little child. His entire “mentality” has been created for the purpose. He just can’t help being faithful and loving and kind. He’s a machine – made so. That’s more than you can say for humans.’

‘But something might go wrong. Some – some —’ Mrs. Weston was a bit hazy about the insides of a robot, ‘some little jigger will come loose and the awful thing will go berserk and – and—’ She couldn’t bring herself to complete the quite obvious thought.

‘Nonsense,’ Weston denied, with an involuntary nervous shiver. ‘That’s completely ridiculous. We had a long discussion at the time we bought Robbie about the First Law of Robotics. You know that it is impossible for a robot to harm a human being; that long before enough can go wrong to alter that First Law, a robot would be completely inoperable. It’s a mathematical impossibility.’

Isaac Asimov, ‘Robbie’, *I, Robot*, 1950
Two Paths Toward Our Robot Future
By Mark O’Connell

October 1, 2015

Markoff\(^1\) begins with the story of Bill Duvall, a young programmer hired to write code for Shakey\(^2\). Duvall became frustrated with the limitations of the robotics project and decamped to another research group, just down the hall at Stanford Research Institute, which was engaged in an entirely different sort of enterprise, called the N.L.S., or “oN-Line System.” This project, led by a computer scientist named Doug Engelbart, was aimed at creating “an interactive system to capture knowledge and organize information in such a way that it would now be possible for a small group of people—scientists, engineers, educators—to create and collaborate more effectively.” The project, in other words, was an early version of the Internet. Not long after walking down the hall and leaving Shakey to its own limited and whirring devices, Duvall used Engelbart’s N.L.S. software to connect a computer in Menlo Park to one in Los Angeles via a data line rented from a phone company. “Bill Duvall,” as Markoff puts it, “would become the first to make the leap from research to replace humans with computers to using computers to augment the human intellect, and one of the first to stand on both sides of an invisible line that even today divides two rival, insular engineering communities.”

For Markoff, the difference between these two fields, A.I. and I.A.\(^3\), is the difference between a future in which human capabilities are enhanced by technology and one in which humans are made effectively obsolete, versioned out by the consequences of our own ingenuity. These two ways of thinking about our relationship with technology, he writes, have remained in a state of unresolved conflict: “One approach supplants humans with an increasingly powerful blend of computer hardware and software. The other extends our reach intellectually, economically, and socially using the same ingredients.”

Markoff’s argument, made in various ways using various examples—industrial mass production, robotics, machine learning, and so on—is that we have now reached a point in the development of these technologies where we can no longer avoid bridging this chasm between the A.I. and I.A. philosophies. Not to do so, he argues, would be to risk a future in which humans become effectively obsolete as meaningful actors in our own world.

\(^1\) Markoff is a journalist interested in artificial intelligence
\(^2\) Shakey is a six-foot-tall robot.
\(^3\) A.I. Artificial Intelligence I.A. Intelligence Augmentation

http://www.newyorker.com/books/page-turner
I. COMPRÉHENSION (10 points)

Tous les candidats traitent les questions de 1 à 6.

Document A

1. Make a list of the characters
   a) who are present.
   b) who are mentioned.

2. Say how these characters are all related.

3. a) Explain what the main characters are talking about.
   b) Say how the conversation illustrates the general atmosphere.

4. Choosing among the following adjectives, qualify the general atmosphere from line 1 to line 14. Justify with examples.

5. Line 8: “It's Gloria and that terrible machine.”
   a) Say what the ‘machine’ is used for.
   b) Did the two main characters want to buy the ‘machine’ for the same reason at first?
   c) Do they both want to keep the ‘machine’?

6. Contrast their opinions about the advantages and the inconveniences of the ‘machine’. Justify by quoting the text.

Les candidats des séries ES-S et ceux de la série L qui composent au titre de la LVO (Langue Vivante Obligatoire) traitent la question 7.

7. Line 27: ‘He just can’t help being faithful and loving and kind.’
   What does ‘can’t help’ imply?

Seuls les candidats de la série L qui composent au titre de la LVA (Langue Vivante Approfondie) traitent la question 8.

8. Lines 26-28: “His entire ‘mentality’ has been created for the purpose. […] He’s a machine – made so. That’s more than you can say for humans”
   a) Why is the word ‘mentality’ mentioned?
   b) By contrast, how does the character consider human beings?
Tous les candidats traitent les questions 9 à 11.

Document B

9. Mention the benefits of the ‘N.L.S.’ oN-Line System. (line 5)

10. Answer the following questions. Justify by quoting the text.
   a) Is the NLS a precursor of the Internet?
   b) Are Shakey and the N.L.S. two different programmes?
   c) Why did Bill Duval abandon the programme related to Shakey?

11. Lines 12-14, “Bill Duvall,” as Markoff puts it, “would become the first to make the leap from research to replace humans with computers to using computers to augment the human intellect.” Explain what this quote means.

Les candidats des séries ES-S et ceux de la série L qui composent au titre de la LVO (Langue Vivante Obligatoire) traitent la question 12.


Seuls les candidats de la série L qui composent au titre de la LVA (Langue Vivante Approfondie) traitent la question 13.

13. Document A, line 18: ‘It has no soul, and no one knows what it may be thinking.’ What could be contradictory in this quote?

Tous les candidats traitent la question 14.

Documents A and B

14. How are the dangers mentioned in document B echoed in document A? (40 words)
II. EXPRESSION (10 points)

Afin de respecter l’anonymat de votre copie, vous ne devez pas signer votre composition, citer votre nom, celui d’un camarade ou celui de votre établissement.

Les candidats des séries ES-S et ceux de la série L qui composent au titre de la LVO (Langue Vivante Obligatoire) traitent les sujets 1 ET 2.

1. One of the two main characters in document A writes an article on Robbie’s first day with the Weston family for the local newspaper. (150 words)

2. Can technology expand our intellectual, economic and social life as implied in document B, lines 23-24? (150 words)

Seuls les candidats de la série L qui composent au titre de la LVA (Langue Vivante Approfondie) traitent le sujet 3.

3. To what extent does technology contribute to human progress? Support your arguments with examples. (300 words)