

Directions:

Read the following four texts. Answer the questions after each text by choosing A, B, C or D. Mark your answers on the **ANSWER SHEET**. (40 points)

Text 3

This year marks exactly two centuries since the publication of "Frankenstein; or, The Modern Prometheus," by Mary Shelley. Even before the invention of the electric light bulb, the author produced a remarkable work of speculative fiction that would foreshadow many ethical questions to be raised by technologies yet to come.

Today the rapid growth of artificial intelligence (AI) raises fundamental questions: "What is intelligence, identity, or consciousness? What makes humans humans?"

What is being called artificial general intelligence, machines that would imitate the way humans think, continues to evade scientists. Yet humans remain fascinated by the idea of robots that would look, move, and respond like humans, similar to those recently depicted on popular sci-fi TV series such as "Westworld" and "Humans."

Just how people think is still far too complex to be understood, let alone reproduced, says David Eagleman, a Stanford University neuroscientist. "We are just in a situation where there are no good theories explaining what consciousness actually is and how you could ever build a machine to get there."

But that doesn't mean crucial ethical issues involving AI aren't at hand. The coming use of autonomous vehicles, for example, poses thorny ethical questions. Human drivers sometimes must make split-second decisions. Their reactions may be a complex combination of instant reflexes, input from past driving experiences, and what their eyes and ears tell them in that moment. AI "vision" today is not nearly as sophisticated as that of humans. And to anticipate every imaginable driving situation is a difficult programming problem.

Whenever decisions are based on masses of data, "you quickly get into a lot of ethical questions," notes Tan Kiat How, chief executive of a Singapore-based agency that is helping the government develop a voluntary code for the ethical use of AI. Along with Singapore, other governments and mega-corporations are beginning to establish their own guidelines. Britain is setting up a data ethics center. India released its AI ethics strategy this spring.

On June 7 Google pledged not to "design or deploy AI" that would cause "overall harm," or to develop AI-directed weapons or use AI for surveillance that would violate international norms. It also pledged not to deploy AI whose use would violate international laws or human rights.

While the statement is vague, it represents one starting point. So does the idea that decisions made by AI systems should be explainable, transparent, and fair.

To put it another way: How can we make sure that the thinking of intelligent machines reflects humanity's highest values? Only then will they be useful servants and not Frankenstein's out-of-control monster.

31. Mary Shelley's novel Frankenstein is mentioned because it_____
- [A] fascinates AI scientists all over the world.
 - [B] has remained popular for as long as 200 years.
 - [C] involves some concerns raised by AI today.
 - [D] has sparked serious ethical controversies.
32. In David Eagleman's opinion, our current knowledge of consciousness_____
- [A] helps explain artificial intelligence.
 - [B] can be misleading to robot making.
 - [C] inspires popular sci-fi TV series.
 - [D] is too limited for us to reproduce it.
33. The solution to the ethical issues brought by autonomous vehicles_____
- [A] can hardly ever be found.
 - [B] is still beyond our capacity.
 - [C] causes little public concern.
 - [D] has aroused much curiosity.
34. The author's attitude toward Google's pledges is one of_____
- [A] affirmation.
 - [B] skepticism.
 - [C] contempt.
 - [D] respect.
35. Which of the following would be the best title for the text?
- [A] AI's Future: In the Hands of Tech Giants
 - [B] Frankenstein, the Novel Predicting the Age of AI
 - [C] The Conscience of AI: Complex But Inevitable
 - [D] AI Shall Be Killers Once Out of Control