CAT 2024 Slot 3 VARC Question Paper with Solution

Read the following passage and answer the questions given below:

Artificial Intelligence (AI) has transformed human life with innovations ranging from personalized recommendations to breakthroughs in healthcare and education. Despite these advances, experts warn about AI's potential destructiveness if left unchecked. Autonomous systems, such as self-driving cars, could cause accidents due to unforeseen errors. Additionally, AI-powered surveillance systems pose risks to privacy and civil liberties, as governments and corporations might misuse them to monitor individuals.

One of the gravest concerns is the development of autonomous weapons, which could make life-and-death decisions without human oversight, leading to ethical dilemmas and potential large-scale harm. Furthermore, AI systems can perpetuate biases, resulting in unfair outcomes in hiring, credit allocation, and judicial decisions.

Efforts to address these concerns include the formulation of ethical guidelines, the promotion of transparency in AI systems, and the regulation of AI applications. Collaboration between policymakers, technologists, and ethicists is crucial to ensure AI remains a force for good. However, as AI continues to evolve rapidly, striking a balance between innovation and responsibility remains an ongoing challenge.

Question 1. What is one of the primary risks of AI-powered surveillance systems, according to the passage?

- (A) They fail to track individuals effectively.
- (B) They lead to reduced innovation in technology.
- (C) They pose risks to privacy and civil liberties.
- (D) They improve decision-making in legal systems.

Answer: (C) They pose risks to privacy and civil liberties.

Solution: The passage explicitly mentions that AI-powered surveillance systems could be misused to monitor individuals, thereby endangering privacy and civil liberties.

Question 2. Which of the following is described as a potential ethical dilemma related to autonomous weapons?

- (A) Their inability to operate autonomously.
- (B) Their use in reducing military casualties.
- (C) Their ability to make life-and-death decisions without human oversight.

(D) Their role in ensuring global stability.

Answer: (C) Their ability to make life-and-death decisions without human oversight. **Solution:** The passage identifies autonomous weapons making decisions without human input as a major ethical concern.

Question 3. What does the passage suggest as a key strategy to address AI's destructive potential?

- (A) Reducing collaboration among technologists and policymakers.
- (B) Prioritizing innovation over regulation.
- (C) Developing ethical guidelines and promoting transparency.
- (D) Encouraging rapid deployment of AI technologies.

Answer: (C) Developing ethical guidelines and promoting transparency. **Solution:** The passage highlights the creation of ethical guidelines and transparency as essential measures to mitigate AI's risks.

Question 4. What challenge does the passage highlight regarding AI's rapid evolution?

- (A) It hampers collaborative efforts among stakeholders.
- (B) It creates a lack of trust among technologists.
- (C) It makes balancing innovation with responsibility difficult.
- (D) It prevents policymakers from formulating ethical standards.

Answer: (C) It makes balancing innovation with responsibility difficult. **Solution:** The passage emphasizes the challenge of striking a balance between AI innovation and responsible development as an ongoing issue.

Question 5. Which of the following is an example of bias perpetuated by AI systems, as mentioned in the passage?

- (A) Errors in self-driving cars causing accidents.
- (B) Unfair outcomes in hiring and credit allocation.
- (C) Development of unethical autonomous weapons.
- (D) Misuse of AI in policymaking.

Answer: (B) Unfair outcomes in hiring and credit allocation. **Solution:** The passage explicitly notes that AI bias has led to unfair outcomes in hiring, credit allocation, and judicial decisions.