



B.K. BIRLA CENTRE FOR EDUCATION

SARALA BIRLA GROUP OF SCHOOLS
A CBSE DAY-CUM-BOYS' RESIDENTIAL SCHOOL



PERIODIC TEST-I : 2025-26 ARTIFICIAL INTELLIGENCE

Class: VII

Date: 03-07-2025

Admission No.

Time : 1 hr.

Max Marks: 25

Roll No. :.....

ANSWER KEY

I. Multiple Choice Questions :

(7 X 1 = 7)

- (1) Which type of intelligence is related to the ability to understand and use language ?
(a) **Linguistic intelligence** (b) Logical mathematical intelligence
(c) Musical intelligence (d) Bodily kinesthetic intelligence
- (2) Which type of intelligence is related to the ability to understand and create music ?
(a) Linguistic intelligence (b) Logical mathematical intelligence
(c) **Musical intelligence** (d) Bodily kinesthetic intelligence
- (3) Which type of intelligence is related to the ability to understand oneself and one's own emotions?
(a) Linguistic intelligence (b) Logical mathematical intelligence
(c) Musical intelligence (d) **Intrapersonal intelligence**
- (4) Which type of intelligence is related to the ability to think spatially and visualize objects ?
(a) Linguistic intelligence (b) Logical mathematical intelligence
(c) Musical intelligence (d) **Spatial intelligence**
- (5)is a free PowerPoint plug-in that develops subtitles in real time of what the teacher is saying.
(a) Open office Translator (b) Microsoft Translator
(c) **Presentation Translator** (d) Powerpoint Translator
- (6) Which one of the following is an artificial intelligence software, a robot writer?
(a) JACK (b) **WASP** (c) Sophia (d) Penny
- (7) How much time does it take for radio waves to cover the distance from Earth to Mars?
(a) 2 minutes (b) 10 minutes (c) **22 minutes** (d) None of the above

II. Fill in the blanks :

(4 X 1 = 4)

- (1) Emotions
- (2) John Maccarthy
- (3) Penny
- (4) Tellspec

III. Short Answer Type Questions :

(4 X 2 = 8)

- (1) Define Artificial Intelligence and Turing Test.

Ans. : It is the study of a system that act in such a way it seems intelligence like human being. Ai is the ability of digital computers or computer controlled robots to solve problems that are normally associated with the higher intellectual processing capabilities of humans. It is way to evaluate a machine's ability to show intelligence behaviour indistinguishable that of a human.

(2) Write two advantages and disadvantages of Artificial Intelligence.

Ans. :

Advantages-

- i. **Accuracy:** AI systems can process large amounts of data quickly and accurately, leading to more precise results compared to human performance in certain tasks, such as data analysis and pattern recognition.
- ii. **Decision Making:** AI systems can analyse complex data and make data-driven decisions faster than humans. This can lead to better decision-making in various fields, including finance, healthcare, and manufacturing.

Disadvantages-

- i. **Job Displacement:** AI automation can lead to job displacement as tasks traditionally performed by humans are automated. This can result in unemployment and socioeconomic challenges, particularly for workers in industries heavily affected by AI adoption.
- ii. **Privacy Concerns:** AI systems often rely on vast amounts of personal data to function effectively. This raises concerns about privacy violations and data security breaches, especially as AI applications become more pervasive in society.

(3) Discuss the use of artificial intelligence in the field of : (a) Transport (b) Education

Ans. :

(a) Transport:

Artificial Intelligence is significantly transforming the transport sector by enhancing safety, efficiency, and convenience. AI is at the core of self-driving vehicles, enabling them to interpret traffic conditions, recognize objects, and make real-time decisions. It also plays a vital role in traffic management systems by analyzing data to reduce congestion and optimize signal timings. In logistics, AI helps in route optimization, fuel efficiency, and predictive maintenance of vehicles, minimizing downtime and operational costs. Public transport systems benefit from AI through improved scheduling, demand forecasting, and customer service chatbots, making travel more reliable and user-friendly.

(b) Education:

In the field of education, Artificial Intelligence is helping to create more personalized and accessible learning experiences. AI-powered platforms can adapt to individual student needs, offering customized content and real-time feedback. Teachers benefit from automated grading systems that save time and allow them to focus more on instruction. AI also enhances learning support through virtual tutors and chatbots that assist students outside of classroom hours. Moreover, AI tools support inclusive education by providing features like speech-to-text, real-time translation, and learning assistance for students with disabilities, thus fostering a more equitable learning environment.

(4) Which was one of the first companies to have self-driving cars? What are some companies that have followed it up?

Ans. : Tesla was one of the first companies to have self driving cars and that has been followed by other companies like Audi, Cadillac, Volvo etc.

IV. Long Answer Type Questions :

(2 X 3 = 6)

(1) Define “Intelligence” and explain the types of various intelligence.

Ans. :

- Intelligence can be defined as the ability to acquire and apply knowledge and skills effectively. It involves the capacity for reasoning, understanding, learning, planning, problem-solving, and adapting to new situations.

Types of various intelligence

- i. Linguistic Intelligence:** This involves proficiency with language, including reading, writing, speaking, and understanding.
- ii. Logical-Mathematical Intelligence:** This type of intelligence is related to logical reasoning, problem-solving, and mathematical skills..
- iii. Spatial Intelligence:** Spatial intelligence involves the ability to perceive and understand spatial relationships. They may excel in fields such as architecture, engineering, and art.
- iv. Musical Intelligence:** Musical intelligence refers to sensitivity to rhythm, melody, pitch, and tone. Individuals with high musical intelligence may have a strong appreciation for music, be skilled at playing musical instruments, or have a talent for composing music.
- v. Bodily-Kinesthetic Intelligence:** Bodily-kinesthetic intelligence is the ability to control one's body movements and handle objects skillfully. Athletes, dancers, surgeons, and actors often exhibit high bodily-kinesthetic intelligence.
- vi. Interpersonal Intelligence:** Interpersonal intelligence involves understanding and interacting effectively with others. They often excel in leadership roles, teaching, counselling, and negotiation.
- vii. Intrapersonal Intelligence:** Intrapersonal intelligence refers to self-awareness and self-understanding.
- viii. Naturalistic Intelligence:** Naturalistic intelligence involves sensitivity to and understanding of the natural world. Such as biology and environmental science.

(2) What are self-driving cars ? Write the answer based on study.

Ans. :

Self-driving cars, also known as **autonomous vehicles**, are vehicles that use **artificial intelligence (AI)**, **sensors**, **cameras**, **radar**, and **software** to drive themselves without direct human input. Based on studies in the field of transportation and computer science, these cars are designed to perceive their surroundings, interpret traffic signals, detect obstacles, and make decisions in real-time — similar to a human driver.

Self-driving cars operate using advanced technologies such as **machine learning**, **computer vision**, and **deep learning algorithms**. These systems allow the car to understand road conditions, follow traffic rules, and even respond to unexpected situations. Research shows that self-driving cars have the potential to **reduce accidents**, **improve traffic flow**, and **increase accessibility** for people who are unable to drive. However, experts also emphasize the importance of further testing, safety regulations, and ethical considerations before they can be widely adopted.

***** ALL THE BEST *****