

Do not start attempting the test paper until you are asked to do so.



ENROLLMENT NUMBER:

STUDENT NAME:



Maximum Marks : 100

Duration : 40 Minutes

Total Questions : 30

Test Paper Type

CC

**1<sup>st</sup>**  
**iAIO** INTERNATIONAL  
ARTIFICIAL INTELLIGENCE  
OLYMPIAD  
2025-2026

Instructions for the Candidates

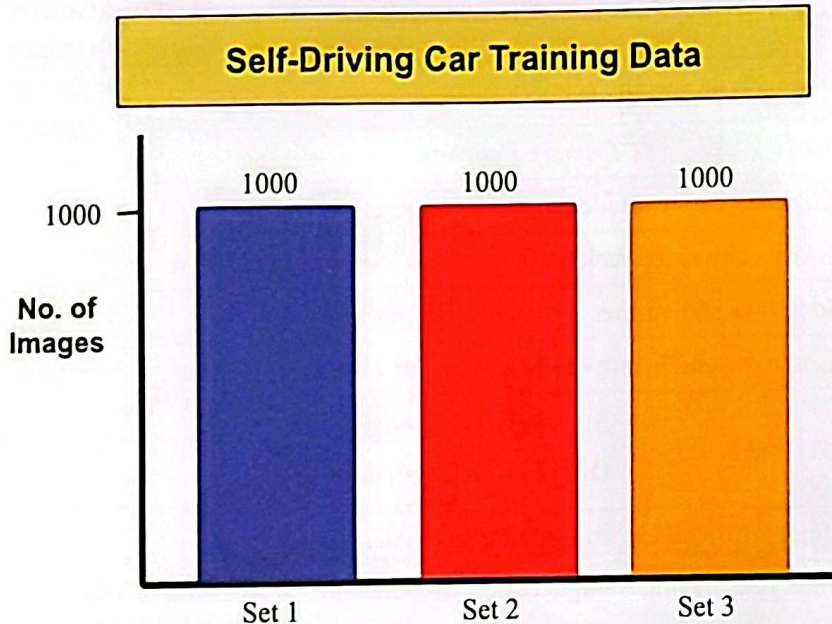
1. For filling up information about yourself on the OMR sheet, you will be given additional ten minutes before the start of the examination.
2. Write your 12-digit iAIO Enrollment Number and your name on top of the Question Paper in the given space.
3. Do not forget to sign the OMR sheet. Also, write your Roll No. on the Question Paper Booklet, and do not take this home.
4. The Question Paper Booklet consists of 30 questions, divided into two sections.
5. Section-A: Artificial Intelligence (25 questions); Section-B: Scholar's Zone (5 questions).
6. Each question of Section-A carries 3 marks, and that of the Scholar's Zone carries 5 marks.
7. All the questions are compulsory, and there is no negative marking.
8. Use of a calculator or any other devices in the examination is strictly prohibited.
9. Choose only ONE OPTION as an answer.
10. BLUE/BLACK ball pen is preferred to darken the circle; however, in case of non-availability, an HB pencil can be used. Mark your choice of answer in the OMR sheet by darkening a circle, as shown below.





5. A student claims that a basic vending machine, which gives snacks and returns change when money is inserted, uses Artificial Intelligence (AI). Why is the student wrong?
- A. Because it uses sensors to recognise the coins and a computer chip to calculate the change.
  - B. Because it only follows a fixed set of rules and cannot learn from new information.
  - C. Because it makes a decision on whether to dispense a snack based on how much money was inserted.
  - D. Because it performs mathematical calculations faster than a human can.

6. A self-driving AI car is being trained. Its training data includes:



- Set 1: 1,000 images of cars on the road.
- Set 2: 1,000 images of cars labelled with their speed (e.g., "Car travelling at 50 kph").
- Set 3: 1,000 images of cars, some of which are labelled 'Taxi', 'Bus', or 'Private Car'.

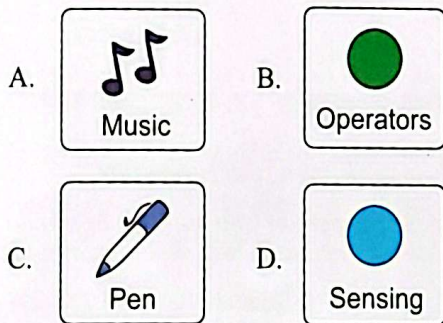
Which set of data is an example of unlabelled data?

- A. Set 1
  - B. Set 2
  - C. Set 3
  - D. Both Set 2 and Set 3
7. The process where a programmer or human expert adds correct labels or tags to raw data, like drawing a box around a cat in a picture and labelling it 'Cat', is known as:
- A. Data cleaning
  - B. Data annotation
  - C. Data compression
  - D. Data storage
8. Before using a dataset to train an AI, the data must be cleaned. Which of the following is part of the data cleaning process?
- A. Adding our own data.
  - B. Removing rows that have incorrect, duplicate, or missing information.
  - C. Finding the average value and most common entry in the data.
  - D. Collecting more information from surveys to add to the dataset.

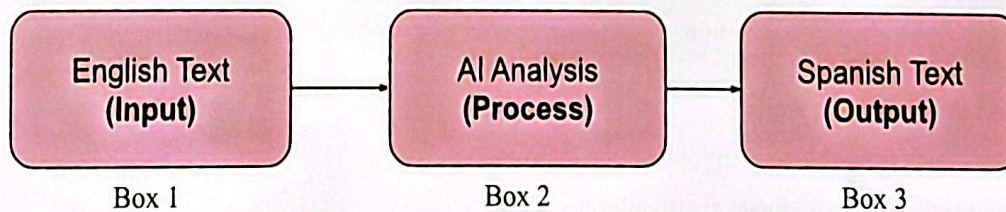


15. Which Scratch block is used to train a simple AI model by recording and classifying user input (e.g., voice or movement patterns)?
- The Motion blocks
  - The Operator blocks
  - The Extension blocks
  - The Sound blocks

16. To make a sprite move randomly within the boundaries of the screen, providing an unpredictable challenge in an AI game, the Scratch programmer would use a block from which category?



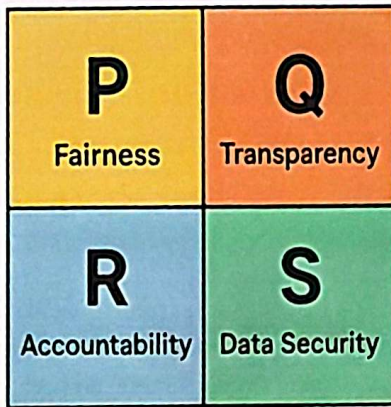
19. The diagram illustrates the core process of a simple AI translation system. What key task is primarily happening inside Box 2: AI Analysis (Process)?



- The AI is simply counting how many words are in the English text.
  - The AI is using Natural Language Processing (NLP) to translate text.
  - The AI is taking a photo of the text to save it as a picture file.
  - The AI is asking another computer to do the big math calculation first.
20. Consider the following statements about AI applications in the digital world:
- Statement I:* Facial Recognition AI is used to unlock mobile phones and verify identities.
- Statement II:* AI is used in search engines to give you the most relevant results quickly.
- Statement III:* AI Chatbots can only answer questions that are pre-programmed and cannot engage in conversation.
- Which statement(s) is/are False?
- Only I
  - Only II
  - Only III
  - I, II, and III

17. In the context of a virtual assistant like Alexa or Siri, which AI technology is used to convert the sound of your voice into text commands that the computer can process?
- Text-to-Speech (TTS)
  - Speech Recognition
  - Robotics
  - Data Mining
18. A factory uses a Robotics AI system to weld car parts. Which key characteristic distinguishes this robot as an AI system from a simple, non-AI industrial machine?
- The robot can connect to the Internet using Wi-Fi to download software updates.
  - The robot can adjust its welding path slightly if a part is placed imperfectly.
  - The robot works faster than a human worker on the assembly line.
  - The robot uses many different wires and cables to get power.

21. The diagram shows four key pillars of AI Ethics. Which pillar is MOST concerned with ensuring that an AI system treats all people, regardless of their background, equally?



- A. P  
B. Q  
C. R  
D. S

22. Consider the following three statements on AI and Digital Citizenship:

Statement 1: A good digital citizen should never use any form of AI for their work, even with permission.

Statement 2: If an AI makes a wrong prediction (e.g., in a medical diagnosis), the person who built the AI should take responsibility.

Statement 3: Data privacy is only about keeping your password secret.

Which of the statement(s) is/are TRUE?

- A. Statement 2 only  
B. Statement 1 and 3 only  
C. Statement 1, 2, and 3  
D. None of the statements

23. In the context of the Ethics of AI, what is meant by Transparency?

- A. The ability of an AI to see through walls.  
B. Making sure the AI's code is visible to everyone on the internet.  
C. The ability to understand why an AI made a particular decision.  
D. Allowing the AI to share a user's private data with other companies.

24. Algorithmic Bias in AI is primarily caused by:

- A. The AI programme is being written in a biased programming language.  
B. The AI is trained with data that is incomplete or unfair.  
C. The AI always chooses the number '6' over the number '7'.  
D. The electricity supply to the data centre is unstable.

25. A parent uses an AI-powered system that analyses their child's online activity in real-time and automatically blocks any video containing violence or inappropriate language, and also cuts off the internet after 2 hours of use. What is the primary ethical and practical purpose of this AI?

- A. To improve the child's typing speed and mathematical ability.  
B. To enhance the child's privacy by hiding their location.  
C. To enforce Parental Controls for online safety and screen time.  
D. To help the child's school track their progress in every subject.



30. You observe an AI system. Its only function is to sort a pile of 1,000 photos into four folders: 'Holiday', 'Family', 'Pets', and 'Work'. It cannot write an email, search the web, or play a video game. Based on this sole function, what type of AI is it MOST LIKELY to be?
- A. Super AI
  - B. General AI
  - C. Narrow AI
  - D. None of the above

