ICI School, Bhosari
PERIODIC TEST :- 2 (2025-26)

Subject :- Ai & Robotics

Name :- _____   Roll.no :- _____

Std :- V Div :- _____   Marks Obtained :- _____

Date :-   Total Marks :-   25

Subject :- AI & Robotics

Marks Obtained :	Supervisor Sign with date :
Total Marks: 25	Subject Teacher's Sign :

Q1. Tick the Correct Answer (5 Marks)

1. A DC Motor is an example of an:
   - ❑ Sensor
   - ❑ Actuator
   - ❑ MOtherboard
2. What happens to the resistance of an LDR sensor when light intensity increases?
   - ❑ It increases
   - ❑ It decreases
   - ❑ It stays the same
3. According to the logic in the guide, what event is used to start the motor when a button is pressed?
   - ❑ Button.Clicked
   - ❑ Button.TouchUp
   - ❑ Button.TouchDOwn
4. If the left wheel rotates anti-clockwise and the right wheel rotates clockwise at same speed , which direction will the car move?
   - ❑ Forward
   - ❑ Backward
   - ❑ Left
5. The if-then-else block in programming is used for :
   - ❑ Repeating an action
   - ❑ Making a decision
   - ❑ Storing a number

Q2. Fill in the Blanks (5 Marks)

(Light Emitting Diode, threshold, true & false, Sensor, 0 to 255)

1. The full form of LED is "_____".
2. A set point used for comparison, like deciding when to turn on a streelight, is called a _____ value.
3. In the code, the direction of a motor is set by a boolean value, such as _____ or _____ .
4. A component that detects a physical property like light is called a _____ .
5. The speed of the DC motor is controlled by a value in the range of _____ to _____ .

Q3. True or False (5 marks)

1. An LDR is an actuator that creates light for the streetlamp. _____
2. The TouchUp event is triggered when you release a button, causing the motors to stop. _____
3. To make a sharp let turn, both motors must spin forward, but the left one spins slower. _____
4. The headlights.Changed even block runs its code when the checkbox is ticked or unticked. _____
5. A speed of 150 is faster than a speed of 250 for the DC motor. _____

Q4. Match the following (5 Marks)

1.DC Motor	Sensor
2.LDR	Boolean Value
3.if-then-else	Actuator
4.true / false	A set comparison point
5.Threshold	Conditional Logic

Q5. Answer in one word (5 Marks)

(Boolean , Actuator, TouchUp, Conditional, if, Resistor)

1. A component that performs a physical action, like moving a wheel. _____
2. A value that can only be true or false. _____
3. The event that occurs when a user lets go of a button. _____
4. What does the 'R' in LDR stand for? _____
5. What kind of block is used to check if the headlight checkbox is ticked? _____

"Machines may be made of steel and silicon, but the soul of robotics is in the creativity of its creators." — *Hiroshi Ishiguro*