

**ICI School, Bhosari**  
**PERIODIC TEST :- 2 (2025-26)**  
**Subject :- Ai & Robotics**

Name :- \_\_\_\_\_

Roll.no :- \_\_\_\_\_

Std :- III Div :- \_\_\_\_\_

Marks Obtained :- \_\_\_\_\_

Date :- \_\_\_\_\_

Total Marks :- 25

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

**Q1. Tick the Correct Answer**

- Which component detects an obstacle without touching it?
  - ☐ DC motor
  - ☐ IR Sensor
  - ☐ LED
- What kind of motor is used to spin the wheels of the RC car?
  - ☐ Servo Motor
  - ☐ Pump Motor
  - ☐ Dc Motor
- What kind of motor is used to push water in the Smart Tap?
  - ☐ DC Motor
  - ☐ Pump Motor
  - ☐ Wheel Motor
- To make the RC car turn right, the left wheel turns clockwise and the right wheels turns:
  - ☐ Clockwise
  - ☐ Anti-clockwise
  - ☐ Off
- The motherboard has special sockets to connect components. These are called:
  - ☐ Holes
  - ☐ Ports
  - ☐ Plugs

**Q2. Fill in the Blanks(Light Emitting Diode,Infrared,actuators,clockwise,Infrared)**

- IR stands for \_\_\_\_\_
- LED stands for \_\_\_\_\_
- An IR Sensor has a transmitter and a \_\_\_\_\_ to work
- Parts that perform actions, like motors, are called \_\_\_\_\_
- To go forward,both the left and right motors must rotate in the \_\_\_\_\_ direction

Q3. True or False

1. The IR sensor in the smart tao detects the presence of a hand. \_\_\_\_\_
2. A DC motor and Pump Motor are used for the exact same purpose. \_\_\_\_\_
3. The Qbrick is another name for the Motherboard. \_\_\_\_\_
4. To make the car turn left, both motors must stop working \_\_\_\_\_
5. The transmitter in an IR sensor sends out invisible IR rays. \_\_\_\_\_

Q4. Match the Following

- |                    |             |
|--------------------|-------------|
| a.Qbrick           | DC Motor    |
| b.Senses Obstacles | Motherboard |
| c.Spins Wheels     | LED         |
| d.Moves Water      | IR Sensor   |
| e.Gives Light      | Pump Motor  |

Q5. Answer in One Word ( **Receiver,RJ,Qbits,True/ON,Transmitter**)

1. What part of the IR sensor sends out a signal?  
**Ans :-** \_\_\_\_\_
2. What part of the IR sensor catches the reflected signal?  
**Ans :-** \_\_\_\_\_
3. What type of cable connects the sensor to the motherboard?  
**Ans :-** \_\_\_\_\_
4. What is the name for robot's building blocks?  
**Ans :-** \_\_\_\_\_
5. What state is the tap in when the IR sensor detects a hand?  
**Ans :-** \_\_\_\_\_