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GRADE 5

Coding and Robotics

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A. Paper structure for the olympiad

Multiple Choice question, true or false and computational type questions.

B. How does it align with the curriculum?

CAPS topics include:

- Internet and E-Communications
- Application Skills
- Algorithms and Coding
- Robotics

C. How it goes beyond?

The olympiad includes some general knowledge questions based on the practical implementation of programming and robots in everyday life.

D. Sample questions

There are three types of questions, they are namely multiple choice, true or false questions and computational type questions.

1. Multiple Choice Questions

1. Event triggers are used for. (1)
   A. Event triggers are used for initiating a response or action when a specific event occurs. Events can be triggered by user actions, system messages, or other sources.
   B. Event triggers are used to communicate events that will take place in future code.
   C. Event triggers predicts the order of events code will follow.
   D. Event triggers are used to schedule times in programming.

2. Breadboards are used for. (1)

   A. Prototyping and testing electronic circuits.
   B. Cutting bread.
   C. Used to bake bread.
   D. High-frequency applications.

3. Which of the following sensors is commonly used in robotics to detect obstacles and measure distances? (1)

   A. Infrared sensor
   B. Thermocouple sensor
   C. pH sensor
   D. Geiger-Muller counter

2. True/False Questions

1. DC motor stands for Direct Current motor. (1)
   A. True
   B. False

2. In coding, broadcasting refers to the process of transmitting a message, signal, or data to multiple recipients or components simultaneously. (1)

   A. True
   B. False

3. API (Application Programming Interface): A set of protocols and tools for building software applications. (1)

    A. True

    B. False

3. Computational Questions

say [Hello!] for (2) secs	end
repeat (10)	move (10) steps

1. Using the lines above. Write a line of code for a simple loop. (4)

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