### **Task 1: Literature Review (20 Marks)**

* **Research and Summarize**:
  + **Current Trends**: Identify and explain the latest trends in computing technology.
  + **Future Trends**: Provide insights into the anticipated future trends in the industry.
  + **Networking and Security**: Discuss modern networking methods and security considerations for computing.
* **Referencing**: Cite all sources in Harvard style.

### **Task 2: Product Design and Development (25 Marks)**

* **Product Review**: Analyze your assigned product category in the context of IoT and sustainability.
* **System Architecture**:
  + Develop a logic circuit diagram of the product’s system architecture.
  + Create a truth table and Boolean expression for the product's logical operations.
* **Referencing**: Use Harvard style for citations.

### **Task 3: Hardware Requirements and Circuit Design (25 Marks)**

* **Block Diagram**: Illustrate the operation and sensor integration of your product.
* **Components and Schematic**:
  + List and describe each component used in the circuit.
  + Design a detailed circuit schematic (using a tool like Tinkercad).
* **Code and Results**:
  + Include relevant code for the circuit.
  + Present results and explain the functionality of each component.
* **Referencing**: Harvard style.

### **Task 4: Conclusion and Security Considerations (20 Marks)**

* **Recommendations**:
  + Provide suggestions for improving technological competitiveness for both users and manufacturers.
* **Security**:
  + Address encryption, firewall settings, and end-user awareness for IoT devices.
* **Referencing**: Use Harvard style consistently.

### **Task 5: Presentation and Formatting (10 Marks)**

* **Formatting**:
  + Use the provided ‘CS Article Template.doc’ and ensure it meets IET/IEEE standards.
* **Writing Quality**:
  + Ensure the article is well-structured, uses clear language, and is professionally presented.
  + Follow Harvard style for all references and citations.

### **Final Checklist**

Complete each of the listed actions under each task and ensure professional presentation by using the checklist on page 12 of the brief.

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