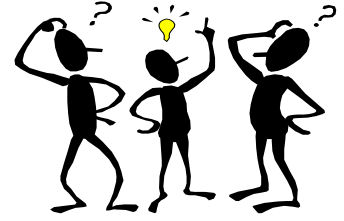


Interrupt Handling

Use the theory notes on the teach-ict.com website to help you answer the questions below. Try to write the answers in your own words.



Questions

1. What do the initials CPU stand for?

2. Explain the role of the CPU

3. The CPU needs to be able to react to events as they occur. One method of doing this is called 'polling'. In your own words, explain how 'polling' works.

4. Identify why polling is not a very efficient method.

5. What do you understand by the term 'interrupt'?

6. Explain what happens to the data and processes which are currently being handled by the CPU when an interrupt signal is received.

7. Explain what happens to the register values once the interrupt has been dealt with.

8. What is meant by the term 'context switching'?

9. Write a detailed algorithm to demonstrate an ISR when a person draws a straight line using a graphics tablet

10. Explain how the CPU would know which interrupt to deal with if more than one were to arrive at the same time and give an example.

11. Write down the extra fact that you found out for yourself about interrupt handling

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