

COAL Practice Questions

1. Explain the difference between Computer Organization and Computer Architecture.
2. List the five levels of abstraction in a computer system from 1 to 5 (Lecture 1 slide 22 to 26)..
3. What are the main functions of the Control Unit within a CPU?
4. Describe the purpose of the following Address Bus, Data Bus, Control Bus, and Memory (Lecture 1 slide 38 to 40)..
5. What are the advantages of using High-Level Languages for programming?
6. Explain how to convert a binary number to its decimal equivalent.
7. Describe the process of converting an unsigned decimal number to binary.
8. Show how the decimal number 422 is converted to hexadecimal.
9. Explain the rules of binary addition.
10. What is the significance of the highest bit in a signed integer?
11. Perform the binary addition of 8bits between 00111010 and 00111000, show the each steps..