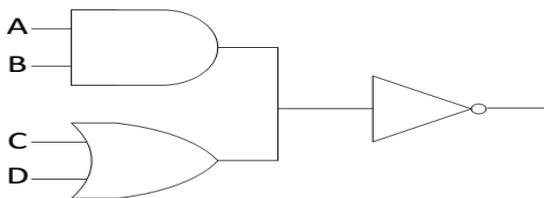


Jimma University
Department of Physics
Assignment III for the course **Electronics I Phys (2062)**

Section III : Digital Circuits

1. Convert 1111 and 1100100 from binary to decimal
2. Convert 71 and 1023 from decimal to binary
3. What is meant by a digital circuit? Why it is important in the world of electronic devices
4. What is the difference between the following types of gates, OR, AND, NOT, NOR and NAND
5. Consider two statements, A and B and construct a truth table with OR, AND and NOR by taking two inputs true (T) and false (F) for each statement.
6. If a 3-input AND gate has eight input possibilities, how many of those possibilities will result in a HIGH output?
7. Design a logic circuit for expression $AB + C$.
8. What is wrong with this circuit? Explain Why.



9. Write the truth table for this function.

