

SNS COLLEGE OF ENGINEERING



**Computer organisation and Architecture** 

## **UNIT-2 ARITHMETIC OPERATIONS**

1. State the principle of operation of a carry look-ahead adder.

2. What are the main features of Booth's algorithm?

- 3. How can we speed up the multiplication process?(CSE Nov/Dec 2003)
- 4. What is bit pair recoding? Give an example.
- 5. What is the advantage of using Booth algorithm?
- 6. Write the algorithm for restoring division.
- 7. Write the algorithm for non restoring division.
- 8. When can you say that a number is normalized?
- 9. Explain about the special values in floating point numbers.
- 10. Write the Add/subtract rule for floating point numbers.
- 11. Write the multiply rule for floating point numbers.
- 12. What is the purpose of guard bits used in floating point arithmetic
- 13. What are the ways to truncate the guard bits?
- 14. Define carry save addition(CSA) process.
- 15. What are generate and propagate

function?

16. What is floating point numbers?

17. In floating point numbers when so you say that an underflow or overflow has occurred?

- 18. What are the difficulties faced when we use floating point arithmetic?
- 19.In conforming to the IEEE standard mention any four situations under which a processor sets
- 20. Why floating point number is more difficult to represent and process than integer?
- 21. Give the booth's recoding and
- bit-pair recoding of the computer.
- 22.Draw the full adder circuit and give the truth table