UNIT - III

1. How negative integer number represented in memory? Explain with suitable example.
2. Explain floating point representation**.**
3. Draw flowchart hardware multiplication algorithm and explain it.
4. Explain arithmetic shift left operation. Describe how overflow is handled.
5. Explain instructions: BSA, ISZ, SZE.
6. Explain Booth's algorithm with flowchart.
7. Write brief note on subroutine call and return.
8. Distinguish between fixed point representation and floating point representation.
9. Describe about Arithmetic Logic Unit.
10. Represent the number (+46.5)10 as a floating-point binary number with 24 bits. The normalized fraction mantissa has 16 bits and the exponent has 8 bits.
11. Define (r-1) 's complement and r's complement.
12. Describe fixed point representation and floating point representation. Give the flowchart of addition and subtraction of two floating-point binary numbers.
13. Explain the Booth's algorithm for multiplication of signed two's complement numbers
14. Explain various number systems and number representations used in system.
15. Dividend A=01110 Divisor B=10001. Explain flowchart for divide operation
16. Perform the subtraction of Unsigned numbers using 10's and 2's compliment. Give at least two examples.
17. Explain the process of multiplying binary integers with Booth's algorithm
18. Explain addition and subtraction algorithms for data represented in signed magnitude and signed 2's compliment.
19. How to represent the signed integer numbers? Perform arithmetic addition and subtraction using 2's compliment. In this how to handle overflow?
20. Multiplicand B=10111, Multiplier A= 10011. Explain the hardware implementation and algorithm for multiply operation.
21. Explain any two ways of adding decimal numbers.