1. What is the 1’s complement of 11010?

a. 11010

b. 11011

c. 00110

d. 00101

2. 2’s complement is obtained by adding 1 to 1’s complement of a number.

a. True

b. False

c. May be

d. Can't say

3. Booth’s Algorithm is applied on \_\_\_\_\_\_\_\_\_\_\_\_\_

a. decimal numbers

b. binary numbers

c. hexadecimal numbers

d. octal Numbers

4. Which of the following is used for binary multiplication?

a. Restoring Multiplication

b. Booth’s Algorithm

c. Pascal’s Rule

d. Digit-by-digit multiplication

5. If Booth’s Multiplication is performed on the numbers 22\*3, then what is 3 referred to as \_\_\_\_\_\_\_\_\_\_

a. accumulator

b. multiplicand

c. quotient

d. multiplier

6. What will be the value obtained after multiplication of (-2) \* (-3) using Booth’s Algorithm?

a. 6

b. -6

c. -2

d. -3

7. What will be the value obtained after multiplication of (-7) \* (3) using Booth’s Algorithm?

a. 6

b. -6

c. -21

d. -3

8. State the difference between Shift right and Arithmetic Shift Right operation.

9. Explain with flowchart Booth’s algorithm for multiplication of Binary numbers.

n >= the number of bits used for representation in binary(both positive numbers)

n + 1 >= the number of bits used for representation in binary(any one number negative)

10. Perform the binary multiplication using Booth’s algorithm for following numbers showing the intermediate output of each step of Booth’s Algorithm:

a. 7 \* 5  = 35

b. 3 \* (-6) = -18

c. (-2) \* 4 = -8

d. (-5) \* (-3) = 15