



## Department of Computer Science and Engineering

### CS8491-COMPUTER ARCHITECTURE

#### Unit II - MCQ Bank

1. The final addition sum of the numbers, 0110 & 0110 is \_\_\_\_\_

**A. 1101**

B. 1111

C. 1001

D. 1010

ANSWER: (A).

2. The product of 1101 & 1011 is \_\_\_\_\_

**A. 10001111**

B. 10101010

C. 11110000

D. 11001100

ANSWER: (A).

3. We make use of \_\_\_\_\_ circuits to implement multiplication.

A. Flip flops

B. Combinatorial

**C. Fast adders**

D. None of the mentioned

ANSWER: (C).

4. The bits 1 & 1 are recorded as \_\_\_\_\_ in bit-pair recording.

A. -1

B. 0

C. +1

**D. both -1 and 0**

ANSWER: (D).

5. The multiplier  $-6(11010)$  is recorded as \_\_\_\_\_

- A. **0-1-2**
- B. 0-1+1-10
- C. -2-10
- D. None of the mentioned

ANSWER: (A).

6. The decimal numbers represented in the computer are called as floating point numbers, as the decimal point floats through the number.

- A. **True**
- B. False

ANSWER: (A).

7. If the decimal point is placed to the right of the first significant digit, then the number is called \_\_\_\_\_

- A. Orthogonal
- B. **Normalized**
- C. Determinate
- D. None of the mentioned

ANSWER: (B).

8. \_\_\_\_\_ constitute the representation of the floating number.

- A. Sign
- B. Significant digits
- C. Scale factor
- D. **All of the mentioned**

ANSWER: (D).

9. The sign followed by the string of digits is called as \_\_\_\_\_

- A. Significant
- B. Determinant
- C. **Mantissa**
- D. Exponent

ANSWER: (C).

10. In IEEE 32-bit representations, the mantissa of the fraction is said to occupy \_\_\_\_\_ bits.

- A. 24
- B. 23**
- C. 20
- D. 16

ANSWER: (B).

11. The normalized representation of  $0.0010110 \times 2_9$  is \_\_\_\_\_

- A. 0 10001000 0010110
- B. 0 10000101 0110**
- C. 0 10101010 1110
- D. 0 11110100 11100

ANSWER: (B).

12. The 32 bit representation of the decimal number is called as \_\_\_\_\_

- A. Double-precision
- B. Single-precision**
- C. Extended format
- D. None of the mentioned

ANSWER: (B).

13. In 32 bit representation the scale factor as a range of \_\_\_\_\_

- A. -128 to 127**
- B. -256 to 255
- C. 0 to 255
- D. None of the mentioned

ANSWER: (A).

14. In double precision format, the size of the mantissa is \_\_\_\_\_

- A. 32 bit
- B. 52 bit**
- C. 64 bit
- D. 72 bit

ANSWER: (B).

15. The result of  $\gg$  of 11001 by 3-bits will be \_\_\_\_\_

- A. **01000**
- B. 01111
- C. 00011
- D. 11111

ANSWER: (A).

16. If Booth's Multiplication is performed on the numbers  $22 \times 3$ , then what is 3 referred to as

\_\_\_\_\_

- A. accumulator
- B. multiplicand
- C. quotient
- D. **multiplier**

ANSWER: (D).

17. If the two numbers are to be multiplied, the mantissa are multiplied and the exponents are added.

- A. **True**
- B. False

ANSWER: (A).

18. \_\_\_\_\_ constitute the representation of the floating number.

- A. Sign
- B. Significant digits
- C. Scale factor
- D. **All of the mentioned**

ANSWER: (D).

19. If  $(101.01)_2 = (x)_{10}$ , then what is the value of x?

- A. 505.05
- B. 10.101
- C. 101.01
- D. **5.25**

ANSWER: (D).

20. On addition of 28 and 18 using 2's complement, we get \_\_\_\_\_

- A. 00101110

**B. 0101110**

C. 00101111

D. 1001111

ANSWER: (B).

21. On subtracting +28 from +29 using 2's complement, we get \_\_\_\_\_

A. 11111010

B. 111111001

C. 100001

**D. 1**

ANSWER: (D).

22. What is the addition of the binary numbers 11011011010 and 010100101?

A. 0111001000

B. 1100110110

**C. 11101111111**

D. 10011010011

ANSWER: (C).

23. Perform binary subtraction:  $101111 - 010101 = ?$

A. 100100

B. 010101

**C. 011010**

D. 011001

ANSWER: (C).

24. On multiplication of (10.10) and (01.01), we get

A. 101.0010

B. 0010.101

**C. 011.0010**

D. 110.0011

ANSWER: (C).

25. What will be the value obtained after multiplication of  $(-2) * (-3)$  using Booth's Algorithm?

**A. 6**

B. -6

C. -2

D. -3

ANSWER: (A).

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