

6 Lecture - CS410

Important Mcqs

1. Which bitwise operator in C sets a bit at a specific position?

- a) &
- b) |
- c) ^
- d) <<

Solution: d) <<

2. What does the bitwise AND operator (&) do when applied to two integers?

- a) Returns the minimum value
- b) Returns the maximum value
- c) Performs a bitwise OR operation
- d) Performs a bitwise AND operation

Solution: d) Performs a bitwise AND operation

3. Which bitwise operator is used to toggle a specific bit in a number?

- a) &
- b) |
- c) ^
- d) <<

Solution: c) ^

4. What will be the result of the expression $12 | 9$ in binary?

- a) 11
- b) 12
- c) 9
- d) 13

Solution: d) 13

5. Which bitwise operator is used to check if a specific bit is set in a number?

- a) &
- b) |
- c) ^
- d) <<

Solution: a) &

6. What is the result of the expression $5 \ll 2$?

- a) 10
- b) 20
- c) 15
- d) 25

Solution: b) 20

7. What will be the value of x after the operation: $x |= (1 \ll 3)$?

- a) 0
- b) 1
- c) 8
- d) 16

Solution: c) 8

8. What does the #define directive do in C?

- a) Defines a new function
- b) Declares a variable
- c) Defines a new data type
- d) Defines a macro

Solution: d) Defines a macro

9. What is the purpose of the #ifdef preprocessor directive?

- a) To check if a function is defined
- b) To include a header file
- c) To define a new macro
- d) To conditionally compile code

Solution: d) To conditionally compile code

10. How can you unset a specific bit in an integer variable 'num' using a macro?

- a) #define UNSET_BIT(num, bit) num |= (1 << bit)
- b) #define UNSET_BIT(num, bit) num &= ~(1 << bit)
- c) #define UNSET_BIT(num, bit) num ^= (1 << bit)
- d) #define UNSET_BIT(num, bit) num = (1 << bit)

Solution: b) #define UNSET_BIT(num, bit) num &= ~(1 << bit)