2) MCQs on increment/decrement, left shift/right shift.

1) Increment operator
```c
#include <stdio.h>
int main() {
    int a = 5;
    a++;
    printf("%d", a);
    return 0;
}
```

A) 4   B) 5   C) 6   D) 7

Ans:- c) 6

2) Decrement operator
```c
#include <stdio.h>
int main() {
    int a = 5;
    a--;
    printf("%d", a);
    return 0;
}
```

A) 6   B) 5   C) 4   D) 3

Ans: c) 4

3) Left shift operator
```c
#include <stdio.h>
int main() {
    int a = 5;
    int b = a << 1;
    printf("%d", b);
    return 0;
}
```

A) 5   B) 8   C) 10   D) 20

Ans: c) 10

4) Righ shift operator

```
#include <stdio.h>
int main() {
    int a = 8
    int b = a >> 1:
    print t ("%.d", b);
    return 0;
}
```

A) 2   B) 3   C) 4   D) 8

Ans: C) 4

5) what does the | operator du?
A. Bitwise AND
B. Bitwise OR
C. Bitwise XOR
D. Bitwise NOT

Ans.   B) Bitwise OR

6) what is the result of 5 &3?
A) 1   B) 2   c) 3   D) 5

Ans: A) 1

7) what is the result of 5 | 3?
A) 7   B) 2   c) 1   D) 8

Ans: A) 7

8) what does the left shift operator (<<) do
A) Divisible by 2
B) multiplies by 2
C) Rotates bits
D) inverts bits

Ans: B) multiplies by 2

9) what is the result of 2 << 1?

A) 6

B) 2

C) 8

D) 12

Ans: B

10) what does the right shift operator (>>) do?

A) Divisible by 2

B) multiples by 2

C) Add bits

D) Subtracts bits

Ans: A) Divisible by 2

11) what is the result of 12 >> 2?

A) 1   B) 3   C) 4   D) 8

Ans: B) 3

12) which operator has the highest precedence among bitwise operators?

A) &   B) | C) ^   D) ~

Ans: D) ~

13) Bitwise operators can be be used on which data types?

A) float only

B) int and char types

C) double only

D) All data types

Ans: B) int and types

14) which of

C?

A) d

B) |

C) & d

D) ^

Ans: C)

15) what is

A) 4

B) -5

C) -6

D) und

Ans:

14) which of the following in not a bitwise operator in

C?

A) &

B) |

C) &&

D) ^

Ans: C) &&

15) what is the result of ~5 on C (Assuming of 32-bit int)?

A) 4

B) -5

C) -6

D) undefined

Ans: C) -6

1) Read two integer values and perform bitwise operations (&, ^, ~, |, >>, <<).

```c
#include <stdio.h>
int main() {
    int a, b;
    // Read two integer values.
    printf("enter first number :");
    scanf("%d", &a);
    printf("enter second number :");
    scanf("%d", &b);
    // Bitwise operations
    printf("\n...Bitwise operations Results...\n");
    printf("a&b = %d\n", a&b);
    printf("a|b = %d\n", a|b);
    printf("a^b = %d\n", a^b);
    printf("~a = %d\n", ~a);
    printf("~b = %d\n", ~b);
    printf("a>>1 = %d\n", a>>1);
    printf("a<<1 = %d\n", a<<1);
    return 0;
}
```

Input:
    Enter two integer values : 5   3

Output:
Bitwise   AND (a&b) = 1
Bitwise   OR (a|b) = 7
Bitwise   XOR (a^b) = 6
Bitwise   (NOT) (~a) = -6
Bitwise   (NOT) (~b) = -4
Bitwise   (a>>1) = 2
Right shit
Left shit (a<<1) = 10