

1. Prepare 10 MCQ's of increment and decrement.

Sol:

1. what is the value of x after the following?

```
C
int x=5;
x++;
```

A) 4

B) 5

C) 6

D) 7

Answer: C

2. what is the value of x after the following?

```
C
int x=5;
++x;
```

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

Answer: B

3. what will this print?

```
C
int x=5;
printf("%d", x++);
```

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

Answer: B

4. what will this print?

```
C
int x=5;
printf("%d", ++x);
```

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

Answer: B

5. what is the value of y?

```
C  
int x = 10  
int y = x-- + 5;
```

```
(x-- + 5)  
y = 10 + 5  
y = 15
```

- A) 14 B) 15 C) 16 D) 10

Answer: B

6. After running the code, what is x?

```
C  
int x = 10;  
x = x-- + 2;
```

x = 8

- A) 10 B) 11 C) 12 D) undefined

Answer: A

7. what is the output?

```
C  
int x = 3;  
printf("%d", --x);
```

- A) 3 B) 2 C) 4 D) undefined

Answer: B

8. what is the output?

```
C  
int x = 3;  
printf("%d", x--);
```

```
i) x=0 to 3  
ii) x=1 to 3  
iii) x=2 to 3  
iv) x=3 to 3
```

- A) 3 B) 1 C) 1 D) undefined

Answer: A

9. what is the final value of x ?

```
C  
int x=5;  
x = ++x + x++;
```

- A) 10 B) 11 C) 12 D) undefined

Answer: C

10. what does $?+ = 1$ do?

- A) decrements ? by 1 B) increments ? by 1
C) multiplies by 1 D) divides ? by 1

Answer: B

11. pre-increment means:

- A) increases value after use
B) increases value before use
C) decreases value before use
D) decreases value after use

Answer: B

12. post-decrement means:

- A) decreases values before use
B) decreases values after use
C) increases values before use
D) increases value after use

Answer: B

13. output of the following:

```
C  
int a=4, b;  
b = a++ + ++b;
```

- A) 9 B) 10 C) 11 D) undefined behavior

Answer: D.

14. what is the value of x?

```
C  
int x=7;  
x = --x;
```

- A) 6 B) 7 C) 8 D) undefined

ANSWER: A

15. what is the output?

```
C  
int x=1;  
printf("%d", x++ + x);
```

- A) 1 B) 2 C) 3 D) undefined

ANSWER: C

16. value of y?

```
C  
int x=2;  
int y=++2*2;
```

- A) 4 B) 6 C) 2 D) 8

ANSWER: B

17. value of y?

```
C  
int x=2;  
int y=x++ * 2;
```

- A) 4 B) 6 C) 2 D) 8

ANSWER: A

18. Which operator is unary?

- A) ++
- B) --
- C) Both A and B
- D) none

Answer: C

19. What is the output?

C

```
int x=5;  
printf("%d %d", x++, ++x);
```

- A) 56
- B) 57
- C) 67
- D) undefined behavior

Answer: D

20. Final value of x?

C

```
int x=0;  
x++;  
x++;  
--x;
```

- A) 0
- B) 1
- C) 2
- D) -1

Answer: B

$x = 0$
 $x = 1$

Answer:

$x = 0$
 $x = 1$

Answer:

$x = 0$
 $x = 1$

Answer:

2. C program to find maximum between two numbers

Program 1: using if - else

```
c
#include <stdio.h>

int main() {
    int num1, num2;
    printf("Enter two numbers: ");
    scanf("%d %d", &num1, &num2);

    if (num1 > num2) {
        printf("%d is maximum.\n", num1);
    }
    else if (num2 > num1)
    {
        printf("%d is maximum.\n", num2);
    }
    else
    {
        printf("Both numbers are equal.\n");
    }
    return 0;
}
```

Program 2: using ternary operator

```
c
#include <stdio.h>

int main() {
    int a, b;
    printf("Enter two numbers: ");
    scanf("%d %d", &a, &b);

    int max = (a > b) ? a : b;
    printf("maximum = %d\n", max);
    return 0;
}
```