

1) Prepare 20 MCQ's of increment and decrement operators

① What is the value of x after the following code?

int $x=5;$

$x++;$

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

A) $x = 5+1 = 6$

② What is printed?

int $x=10;$ printf(".1.d", $++x$);

- A) 9 B) 10 C) 4 D) Compiler error

A) $x = 10+1 = 11$

③ What is printed?

int $x=10$

printf(".1.d", $x++$);

- A) 9 B) 10 C) 11 D) 12

A) 10

④ What is the final value of x ?

int $x=3;$

int $y = ++x + x++;$

- A) ~~X=4~~ B) ~~X=5~~ C) $x=6$ D) $x=7$

Ans) x becomes 5

⑤ What is the value of y in the previous question?

- A) 7 B) 8 C) 9 D) 10

Ans:- $y = 4+4 = 8$

$7+x=4, x+7=4$

$4+4 = 8$

⑥ What are the post-decrement do?

- A) Decrease after using the value
B) Decrease before using the value
C) Increase before using the value
D) No effect

⑦ What is printed?

int $x=5;$

printf(".1.d", $--x$);

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

Ans) $x = 5 - 1 = 4$

⑧ what is printed?

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

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

⑨ what operator have higher precedence?

A) post-increment

B) pre-increment

C) They have equal precedence.

D) Addition

⑩ what is the output?

```
int x=2;
```

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

- A) 6 B) 8 C) 9 D) undefined

Ans) undefined behavior in c/c++

⑪ what is printed?

```
int x=7;
```

```
printf("%d", ++x+2);
```

- A) 8 B) 9 C) 10 D) 11

Ans) $x = 7 + 1 = 8 + 2 = 10$

⑫ what is printed?

```
int x=4;
```

```
printf("%d.%d.%d", x++, ++x);
```

- A) 46 B) 45 C) 55 D) undefined

⑬ what is valid?

A) ++(x+1)

B) (x++)++

C) ++x

D) x++++

⑭ what is the final value of x?

```
int x=10;
```

```
x=x++ + ++x;
```

- A) 20 B) 21 C) undefined D) 22

15) what happens if you use ++ on a constant ?
 ++10;

- A) 8 B) 10 C) valid but Meaningless

~~A~~ compiler - time error

16) what is printed ?

int x=1;

printf ("%d", x++ + x++);

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

17) which operator modifies the variable ?

- A) x++ B) x+=1 C) ++x ~~D~~ Both B and C

18) what is the final value of x ?

int x=0

x+1;

+x;

x--;

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

19) which one is equivalent to $x=x+1$?

- A) ++x B) x++ ~~C~~ Both D) None

20) what is printed ?

int x=5;

printf ("%d", --x-x--);

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

2) program to find Maximum Between two numbers using nested if

```
#include <stdio.h>
int main()
{
    int a,b;
    printf("Enter two numbers: ");
    scanf("%d %d", &a, &b);
    if (a == b) {
        if (a > b) {
            printf("\n%d is greater.\n", a);
        }
        else
    }
    else
    {
        printf("\n%d is greater.\n", a);
    }
    printf("Both numbers are equal\n");
}
return 0;
```

program to find maximum among three numbers using nested if ?

```
# include < stdio.h >
int main ()
{
    int a,b,c;
    printf ("Enter three numbers:");
    scanf ("%d%d%d", &a, &b, &c);
    if (a>b)
    {
        if (a>c)
        {
            printf ("\n%d is the greatest.\n", a);
        }
        else
        {
            printf ("\n%d is the greatest.\n", c);
        }
        else
        {
            if (b>c)
            {
                printf ("\n%d is the greatest.\n", b);
            }
            else
            {
                printf ("\n%d is the greatest.\n", c);
            }
        }
    }
    return 0;
}
```