

1. `int a=5, b;`

`b = a++;`

what are the values of a and b after the execution of these statements?

a) $a=5, b=5$

b) $a=6, b=5$

c) $a=5, b=6$

d) $a=6, b=6$

Answer:- (b) $a=6, b=5$

2. What will be the output of the following code?

```
int x=10;
```

```
printf("%d%d\n", x++, *x);
```

a) 10 12

b) 11 11

c) 11 12

d) The order of evaluation is unspecified, leading to potential variations.

Answer :- (d)

3. What will be the output of the following code?

```
int num=f;
```

```
if (num % 2 == 0) {
```

```
    printf("even\n");
```

```
} else {
```

```
    printf("odd\n");
```

```
}
```

a) even

b) odd

c) error

d) No output.

Ans :- (b) odd

4. `int a = 10, b = 20;`

```
if (a > b) {  
    if (b <= 15) {  
        printf ("Hello\n");  
    }  
    else  
    {  
        printf ("World\n");  
    }  
}
```

Ans :- b) World

```
} else {  
    printf ("c programming\n");  
}  
}
```

- a) Hello
- b) World
- c) c programming
- d) error

5. `int i = 0;`

```
if (i++ == 0) {  
    i++;  
}  
else {  
    i--;  
}
```

Ans :- c) 2

a) 0

b) 1

c) 2

d) -1

6) `int score = 75;`

```
if (score >= 90) {  
    printf ("Grade A\n");  
}  
else if (score >= 70) {
```

```
    printf ("Grade B\n");
}
else if (score >= 50) {
    printf ("Grade C\n");
}
else {
    printf ("Grade F\n");
}
```

- a) Grade A
- b) Grade B
- c) Grade C
- d) Grade F

Ans :- b) Grade B

```
#) int j = 3;
int k = ++j * 2;
```

Ans :- b) 8

- a) 6
- b) 8
- c) 7
- d) 9

```
8) int p = 5, q = 10;
if (p > 0 && q < 15) {
    printf ("condition met\n");
}
else {
    printf ("condition Not Met\n");
}
```

- a) condition Met
- b) condition Not Met
- c) Error
- d) No output

Ans :- a) Condition Met

9. `int m=2;`

`int n = m++ + ++m;`

a) $m=3, n=4$

b) $m=3, n=5$

c) $m=2, n=3$

$m=2, n=4.$

Ans:- b) $m=3, n=5.$

10. `int main() {`

`int x = 5;`

`int y = --x;`

`printf("%d,%d", x, y);`

`return 0;`

}

a) $x=5, y=5$

b) $x=4, y=5$

c) $x=4, y=4$

d) $x=5, y=4$

Ans:- c) $x=4, y=4$

11. `int a = 10;`

`int b = a--;`

a) $a=10, b=10$

b) $a=9, b=10$

c) $a=9, b=9$

d) $a=10, b=9$

Ans:- b) $a=9, b=10$

12. int main()

```
int i = 3;  
printf("%d,%d", i--, -i);  
return 0;  
}
```

- a) 3 2
- b) 2 3
- c) 2 1
- d) 3 1

Ans:- (d) 3 1

13. int main()

{

```
int a = 1, b = 1, c;
```

```
c = a++ + b;
```

```
printf("%d,%d", a, b);
```

- a) a=1, b=1

- b) a=2, b=1

- c) a=1, b=2

- d) a=2, b=2

Ans:- (b) a=2, b=1

14. int main()

{

```
int a = 1, b = 1, d = 1;
```

```
printf("%d,%d,%d,%d", ++a + ++a + a++, a++ +  
++b, ++d + d++ + a++);
```

}

a) 15, 4, 5

b) 9, 6, 9

c) 9, 3, 5

d) undefined

Ans:- (d) undefined

15) int main()

{

int a = 10, b = 10;

if (a == 5)

 b--;

 printf("%d, %d", a, b--);

}

a) a=10, b=9

b) a=10, b=8

c) a=5, b=9

d) a=5, b=8

Ans:- (c) a=5, b=9

16. int main()

{

do { int i = 0; for (i = 0; i < 10; i++)

 int j = i++ + i;

 printf("%d\n", j);

}

a) 0

b) 1

c) 2

d) compile time error

Ans:- (b) 1

17) int main()

{

int i=2;

int j = ++i + i;

printf("%d\n", j);

}

a) 6

b) 5

c) 4

d) Compile-time Error

Ans:- a) 6

18 int main()

{

int i=2;

i = i++ + i;

printf("%d\n", i);

}

a) = operator is not a sequence point

b) ++ operator may return value with or without side effects

c) it can be evaluated as (i++) + i or i + (++i)

d) = operator is a sequence point

Ans:- a) = operator is not a sequence point

19) What is the value of

in $a = 3;$

$a = a++ + a^-;$

a) 6

b) 7

c) 8

d) 9

Ans:- b) 7

20) What is the value of ~~int~~

$\text{int} q = 8;$

$q = q - - + + q + q - ?$ (Ans 12)

a) 12

b) 13

c) 14

d) 15

Ans:- a) 12.

2A) $\text{int main() \{}$

$\text{int num1, num2, num3;}$

$\text{printf ("Enter three numbers : ");}$

$\text{scanf ("%d %d %d", &num1, &num2, &num3);}$

$\text{if (num1 >= num2 \&& num1 >= num3) \{}$

$\text{printf ("the maximum number is : \%d\n", num1);}$

}

$\text{else if (num2 >= num1 \&& num2 >= num3) \{}$

$\text{printf ("the maximum number is : \%d\n", num2);}$

```
else {
    printf("the maximum number is: %d\n", num3);
}
return 0;
}
```

(08)

```
#include <stdio.h>
```

```
int main(void) {
```

```
    int a, b, c, max;
```

```
    printf("Enter three numbers:");
```

```
    scanf("%d %d %d", &a, &b, &c);
```

```
    Max = (a > b) ? (a > c ? a : c) : (b > c ? b : c);
```

```
    printf("Largest of three numbers is %d\n", Max);
```

```
    return 0;
}
```