

Ques

① #include <stdio.h>
#include <conio.h>
void main()
{
 int a, b;
 printf ("enter the value of a : ");
 scanf ("%d", &a);
 printf ("enter the value of b : ");
 scanf ("%d", &b);
 printf ("%d", a & b);
 printf ("%d", a / 2);
 printf ("%d", ~a);
 printf ("%d", a ^ b);
 getch();
}

Input:-

enter the value of a: 4

enter the value of b: 2

Output:-

8

2

12

```
② #include <stdio.h>
#include <conio.h>
void main()
{
    int a,b;
    printf ("enter the value of a: ");
    scanf ("%d", &a);
    printf ("enter the value of b: ");
    scanf ("%d", &b);
    printf ("%d", a < b);
    printf ("%d", a > b);
    printf ("%d", a <= b);
    printf ("%d", a >= b);
    printf ("%d", a != b);
    printf ("%d", a == b);
    getch();
}
```

Input:-

enter the value of a: 1

enter the value of b: 2

Output:-

0

1

0

1

0

0

the following

I MCQ's on Right shift & left shift
 Increment & decrement.

- ① What is the primary function of (right shift & left shift) operator for positive integers in most programming languages (C, C++, Java, Python):

Ans Divide the number by 2 for each shift.

- ② What is the result of the expression $10 \gg 3$ in C?

Ans 5.

- ③ When an unsigned integer is right-shifted, what value are the vacated leftmost bit positions filled with?

Ans zeros.

- ④ In C-programming, what is the result of the expression $16 \gg 3$?

Ans 2.

- ⑤ If an unsigned char variable x holds the value 255 (binary 11111111), what is value of expression $x \gg 4$?

Ans 15.

- ⑥ In C, what is the result of the expression $12 \ll 2$?

⑦ What is the primary function of increment (`++`) operator in C?

Ans Increments the value of the variable by 1.

⑧ What will be the value of `i` after the following code snippet executes?

Ans

```
C int q=5, i;
i = q++;
```

Ans 5.

⑨ Which of the following is an invalid operand for the increment and decrement operators?

Ans A Constant (`++5`)

⑩ What is the output of the following C code?

```
C int x=5, y;
y = x++ / 2;
printf("%d", y);
```

Ans 2

⑪ What will be the final value of `a` and `b` after the following code snippet executes?

```
C int a=4, b=c;
b = -a;
c = a--;
```

Ans `a=2, b=3, c=3`

⑫ What is the result of
Ans 20.

⑬ what will be the output of the following

C-Program

```
#include <stdio.h>
int main() {
    int a=4, b, c;
    b = -a;
    c = a - -5;
    printf("%d %d\n", b, c);
    return 0;
}
```

Ans 233.

⑭ The right shift operator $>>$ is equivalent to which arithmetic operator for positive integers?

Ans Division by 2^n .

⑯ What will be the output of the following C-program?

```
{\n    int x=5; int y=x++/2;\n    printf("%d", y);\n    return 0;\n}
```

2