

PART A: Attempt All Question

10*2 M

1. What would be the output of the following program

```
main( )
{
    int i = 2, j = 3, k, l ;
    float a, b ;
    k = i / j * j ;
    l = j / i * i ;
    a = i / j * j ;
    b = j / i * i ;
    printf( "%d %d %f %f", k, l, a, b ) ;
}
```

2. What would be the output of the following program

```
main( ) {
    int a = 300, b, c ;
    if ( a >= 400 )
        b = 300 ;
    c = 200 ;
    printf ( "\n%d %d", b, c ) ;
}
```

3. C programs are converted into machine language with the help of

- (1) An Editor
- (2) A compiler
- (3) An operating system
- (4) None of the above

4. A C variable cannot start with

- (1) An alphabet
- (2) A number
- (3) A special symbol other than underscore
- (4) Both (2) & (3) above

5. Point out the errors, if any, in the following programs:

```
main( )
{
    float a = 12.25, b = 12.52 ;
    if ( a = b )
        printf ( "\na and b are equal" ) ;
}
```

6. What would be the output of the following program

```
main( )
{
    int i = 4, j = -1, k = 0, w, x, y, z ;
    w = i || j || k ;
    x = i && j && k ;
    y = i || j && k ;
}
```

```

z = i && j || k ;
printf ( "\nw = %d x = %d y = %d z = %d", w, x, y, z ) ;
}

```

7. What would be the output of the following program

```

main( ) {
int j ;
while ( j <= 10 )
{
printf ( "\n%d", j ) ;
j = j + 1 ;
}
}

```

8. The Term _____ means the ability to take many forms.

- a. Inheritance
- b. Polymorphism
- c. Member function
- d. Encapsulation

9. Which of the following mechanisms is/are provided by Object Oriented Language to implement Object Oriented Model?

- a) Encapsulation
- b) Inheritance
- c) Polymorphism
- d) All of the mentioned

10. The keyword used to transfer control from a function back to the calling function is

- a. Switch
- b. Goto
- c. go back
- d. return

PART A: Attempt Any Five Question

10*5 M

1. If the marks obtained by a student in five different subjects are input through the keyboard, find out the aggregate marks and percentage marks obtained by the student. Assume that the maximum marks that can be obtained by a student in each subject is 100.
2. Write a C program to swap two numbers using function
3. While purchasing certain items, a discount of 10% is offered if the quantity purchased is more than 1000. If quantity and price per item are input through the keyboard, write a program to calculate the total expenses. Draw a flow chart
4. Any integer is input through the keyboard. Write a program to find out whether it is an odd number or even number using function.
5. The marks obtained by a student in 5 different subjects are input through the keyboard. The student gets a division as per the following rules:
Percentage above or equal to 60 - First division
Percentage between 50 and 59 - Second division
Percentage between 40 and 49 - Third division
Percentage less than 40 - Fail
Write a program to calculate the division obtained by the student.
6. Write a program to find the smallest among three numbers
7. Write a program to find whether given number is prime or not
8. Draw a flow chart to calculate the average from ten exam