



**PRESIDENCY UNIVERSITY,  
BENGALURU  
SCHOOL OF ENGINEERING**

**MID TERM EXAM**

**Odd Semester:** 2018-19

**Date:** 24 November 2018

**Course Code:** CSE 151

**Time:** 1 Hour

**Course Name:** Computer Programming

**Max Marks:** 10

**Branch & Sem:** Chemistry Cycle & I Sem

**Weightage:** 20%

**Instructions:**

- (i) Read the question properly and answer accordingly.
- (ii) Question paper consists of 3 parts.
- (iii) Scientific and Non-programmable calculators are permitted.

**Part A**

Answer **all** of the Questions. **Each** question carries **one** marks

(2x1=2)

1. What is the output of the following?

<p>a. <code>int a = 3, b=10; int c; c = (b*8) % a; printf("%d", c);</code></p>	<p>b. <code>float a = 5+3; printf("%f", a);</code></p>
--	--

2. a. `res = ++a*--b+d` (where  $a = 3, b = 4, d=3$ , all are of type int)

Convert the above expression to get the value of `res = 24`

b. `res = a+b*4-d` (where  $a = 4, b = 3, d=1$  all are of type int)

Convert the above expression to get the value of `res = 21`

**Part B**

Answer the Questions. Question carries **three** marks

(1x3=3)

3. Dorms allotted for hostel occupants is as follows:

Sections	Roll Number	Floor number
A ,C	Even (2,4,6 .....)	1
A ,C	Odd (1,3,5.....)	2
B , D	-	3
Others	-	4

A software need to be developed with following requirements:

- I. Read the total number of students
- ii. Read the section for each student
- III. Read the roll number of the student
- IV. Compare the section and roll number
- V. Display the appropriate room number based on the section and roll number for each student

```
void main()
{
    __Q3.1__ num_of_students, __Q3.2__, __Q3.3__ ;
    char __Q3.4__ ;
    printf("enter total number of students\n");
    scanf("%d", num_of_students);
    for(__Q3.5__ ; __Q3.6__ ; index++)
    {
        printf("Enter the section for student %d \n", index);
        scanf(" %c ", &sec);
        printf("Enter the roll num for student %d \n", index);
        scanf(" %d ", &rollnumber);
    }
}
```

```

if (sec == __Q3.7__ || __Q3.8_ == __Q3.9_ )
{
    If(__Q3.10__%2==0)
        printf("1st floor \n");
    else
        printf("2nd floor \n");
}
else if(sec == __Q3.11__ || __Q3.12_ =='B')
{
    printf("3rd floor \n");
}
else
{
    printf("4th floor\n");
}
}
}

```

\* Complete the answers for Q3.1 to Q3.12

**Output:**

```

Enter Total number of students
3
Enter the section for student1
A
Enter the roll num for student1
24
1st floor
Enter the section for student2
D
Enter the roll num for student2
20
3rd floor
Enter the section for student3
C
Enter the roll num for student3
15
2nd floor

```

**Part C**

Answer the Questions. Question carries **five** marks

(1x5=5)

```

4.      sum = 0;
        for(i = 1; i <=2 ; i = i+1 )
        {
            for(j = 1; j <=2; j + +)
            {
                sum = sum + (i * j);
            }
        }

```

Trace the flow of execution of above code in the format given below :

Iteration number	Value of variable (after completion of the iteration)		
	i	j	Sum
1	1	1	1
2	1	2	3