Total **10 Marks**

Instructions:
1. This question paper contains a total of **1** page (**1** side of paper).
2. Write your name, roll number, department, and section on every side of every sheet of this booklet
3. Write final answers neatly with a blue/black pen in the given boxes.
4. **Answers written outside the box will NOT be graded.**

Q. 1: Write the output of the following program in the appropriate box.

(2+3+4+1=10 Marks)

```
1   #include <stdio.h>
2
3   #define calc(x) (x/x)
4
5   int func(int a, int b){
6       static int c = 0;
7       c += a+b;
8       return c;
9   }
10
11  int eval(int a, int b){
12      if(b==1) return a-1;
13      int half = floor(b/2);
14
15      if(b%2)
16         return eval(a,half)*eval(a,half)*a;
17      else
18         return eval(a,half)*eval(a,half);
19  }
20
21  int main()
22  {
23      int v = 2;
24      printf("%d\n",calc(4-8));
25      while(v){
26          printf("%d\n",func(v,v-1));
27          v--;
28      }
29
30      printf("%d\n", eval(3,5));
31      return 0;
32  }
```

Line No.	Output
24	-6
25-28	3 4
30	48

Q. 2. How many times function call eval(3,1) will get executed after calling eval(3,5) at line 30?

4