

## Question - 1

SCORE: 5 points

## Q1. Solve the question

 $15 > 7 ? 3 > 18 ? 12 : 2 > 2 ? 14 : 18 : 8$ 

- ☐ 8
- ☐ 14
- ☒ 18
- ☐ 2

## Question - 2

SCORE: 10 points

## Develop Billing Interface\_10 Marks

**Paramount Shopping Complex** is planning to give heavy discounts on winter sale. Their marketing strategy goes like this :

1.) If the billing amount is equal to or greater than Rs.10,000, customers will get the discount of 20%.

2.) If customer is male, then the discount exceeds by 5%.

(Making total discount 25%)

3.) If customer is female, then the discount exceeds by 10%.

(Making total discount 30%)

**4.) One Important Condition :** If the total billing amount entered by user is greater than Rs. 9000 but less than Rs. 10,000, then the customer should get one more opportunity to exceed his bill amount to 10,000 or more so as to meet the **CONDITION 1.**

## Study the test cases below:

Test Case 1:

**Sample Input:**

9500 //Billing Amount

Y //User press 'Y' or 'y' that stands for Yes, he wants to purchase more, (Fulfilling condition 4 above)

10000 // New Billing Amount

F // 'F' or 'f' means female

**Sample Output:**

7000.00 // Output is upto two decimal point. Generated after, applying 30% discount **on New Billing Amount.**

Test Case 2:

**Sample Input:**

9500 //Billing Amount

N //User press 'N' or 'n' that stands for No. He is not interested in purchasing more.

m // 'M' or 'm' means male

**Sample Output:**

9025.00 // Output is upto two decimal point. Generated after, applying 5% discount **on Billing Amount.**

Test Case 3:

**Sample Input:**

5000

f

**Sample Output:**

4500.00

Test Case 4:

**Sample Input:**

12500.90

f

**Sample Output:**

8750.63

Question - 3

SCORE: 5 points

**Q2. What is the output of this C code?**

```
int main()
{
    int a = 10, b = 5, c = 3;
    b != !a;
    c = !!a;
    printf("%d\\t%d", b, c);

    return 0;
}
```

☐ 0 3

☒ 5 1

☐ 5 3

☐ 1 1

Question - 4

SCORE: 5 points

**Determine the output of following C code?**

```
#include <stdio.h>
int main()
{
    int a = 1;
    int b = 1;
    int c = a || --b;
    int d = a-- && --b;
    printf("%d,%d,%d,%d", a, b, c, d);
    return 0;
}
```

☐ 0,1,1,0

☒ 0,0,1,0

☐ 0,0,0,0

☐ 1,1,1,1

Question - 5  
Predict the output of following C code?

SCORE: 5 points

```
#include <stdio.h>

int main()
{
    int x = 0;
    if (x == 1)
        if (x == 0)
            printf("if\n");
        else
            printf("else if\n");
    else
        printf("else\n");
}
```

- ☐ if
- ☐ else if
- ☒ else
- ☐ None of the above

Question - 6  
Q3. Predict the output of the code:

SCORE: 5 points

```
#include<stdio.h>
void main()
{
    if(10,20,30)
    {
        Printf("Entered in loop");
        goto label;
        if(15,-1,0)
        printf("\n Entered in Nested Loop");
    }
    label:
    printf("\n Outside the loop");
}
```

☐

Entered in loop Entered in Nested Loop Outside the loop

- ☐ Entered in loop Entered in Nested Loop
- ☒ Entered in loop Outside the loop
- ☐ Compile Error

Question - 7  
Q4. What is the output of this C code?

SCORE: 5 points

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```
#include<stdio.h>
int main()
{
printf("Hello World! %d \n", x);
return 0;
}
```

- ☐ Hello World! x;
- ☐ Hello World! followed by a junk value
- ☒ Compile time error
- ☐ Hello World!

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Question - 8  
What is the output of this C code?

SCORE: 5 points

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```
#include <stdio.h>

void main()
{
    int k = 8;
    int m = 7;
    int z = k < m ? k++ : m++;
    printf("%d", z);
}
```

- ☒ 7
- ☐ 8
- ☐ Compile Time Error
- ☐ None of the above

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Question - 9  
What is the output of this C code?

SCORE: 5 points

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```
#include <stdio.h>

int main()
{
    int a = 1;
    if (a--)
        printf("True");
    if (a++)
        printf("False");
}
```

}

- ☐ TrueFalse
- ☒ True
- ☐ False
- ☐ None of the above