

**Public questions**

1. Write a while loop that displays numbers 5,10,15,.....50(M-19)

```
i=5;
while(i<=50)
{
cout<<i;
i+=5;
}
```

2. Write a c++ program to print the following series 1 3 5 7.....75(jun-2019)

```
i=1;
while(i<=75)
{
cout<<i;
i+=2;
}
```

(OR)

```
for(i=1;i<=75;i+=2)
```

```
cout<<i;
```

```
3. for(m=1;m<=9;m+=2)
```

```
cout<<m; (sep-2020)
```

(i) How many times the loop will be executed? **Ans:** 9 times

(ii) Write the output of the above snippet **Ans:** 1 3 5 7 9

4. Write a c++ program to sum the numbers from 1 to 10 using for loop(May-2022)

```
#include<iostream>
```

```
using namespace std;
```

```
int main()
```

```
{
```

```
int i,sum=0;
```

```
for(i=1;i<=10;i++)
```

```
{
```

```
sum=sum+i;
```

```
}
```

```
cout<<"The sum of 1 to 10 is"<<sum;
```

```
return 0;
```

```
}
```

5. Write a c++ program to display numbers from 1 to 10 .Except 5 using 'for' and continue statement(March-2022)

```
#include<iostream>
```

```
using namespace std;
```

```
int main()
```

```
{
```

```
int i;
```

```
for(i=1;i<=10;i++)
```

```
{
```

```
if(i==5)
```

```
{
```

```
continue;
```

```
}
```

```
cout<<i<<"\n";
```

```
}
```

```
return 0;
```

```
}
```

6. Convert the following if-else statement into conditional statement.(June-2023)

```
if(marks>=60)
```

```
Grade='A';
```

```
else
```

```
Grade='B';
```

**Ans:** Grade=(marks>=60)?A:B;

7. What are the values of variables m and n after the assignments in line(1) and line(3)(March 2019)

(1) m,n:=4,10

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(2) --m,n=??

(3) m,n:=m+5,n-2

(4) ) --m,n=??

**Ans:** (1) m=4,n=10 (3)m=9,n=8

8. Read the following c++ snippet and answer the questions given below:(March-2019)

```
class student
```

```
{
int m,n;
public:
void add();
float calc();
}x1,x2;
```

(i) Identify the members of the class.

(ii) What is size of the objects x1,x2 in memory?

**Ans:** (i) m,n,add(),calc() (ii) x1=8 bytes,x2=8 bytes

9. Write the output for the following:(Mar-2023)

```
#include<iostream>
using namespace std;
int main()
{
double var1=87.25255;
cout<<(float)var1<<endl;
cout<<(int)var1<<endl;
}
```

**Output:**

87.2525

87

10. Read the following c++ code and answer the questions given below:(March-2020)

```
#include<iomanip>
#include<iostream>
using namespace std;
class product
{
int code,quantity;
float price;
public:
void assigndata();
void print();
};
int main()
{
cout<<"\n memory allocation for object p1"<<sizeof(p1);
cout<<"\n memory allocation for object p2"<<sizeof(p2);
return 0;
}
```

i) What is name of the class in the above program?

ii) What are the data members of the class?

iii) What is the memory size of the objects p1,p2;

**Ans:** i) product ii) code,quantity,price iii) p1=12 bytes,p2=12bytes

11. Initially j is 20 and p is 4, then what will be the value of  $p = p^{*++j}$ ? (March-2019)

**Ans:84**

12. Assume a=15,b=20: What will be the result of the following operations? (March-2019)

(i) a&b (ii) a|b (iii) a^b (iv) a>>3 (v) (~b)

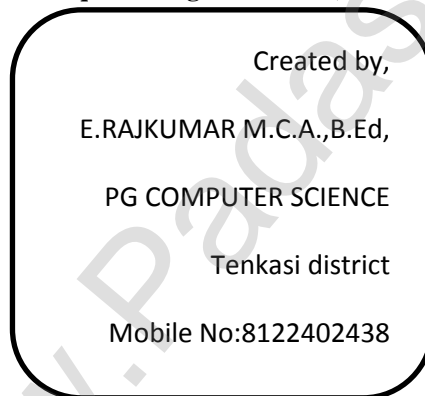
**Ans:** (i) 0000100=4<sub>10</sub> (ii) 00011111 =31<sub>10</sub> (iii) 00011011=27<sub>10</sub> (iv) 00000001=1<sub>10</sub> (v) 11101011=-21<sub>10</sub>

13. a=65,b=15: then find (March-2020)

(i) a&b (ii) a^b

Ans: 0000 0001<sub>2</sub>=1<sub>10</sub>

01001110<sub>2</sub>=78<sub>10</sub>



14. Read the following c++ snippet and answer the questions given below

class personal

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```
{
int admno,rno;
protected:
char name[20];
public:
personal();
void pentry();
void pdisplay();
}
class Marks:private personal
{
int m;
protected:
char grade[5];
public:
marks();
void mentry();
void mdisplay();
}
class result:public marks
{
float total,agg;
char remark[5];
result();
void rcalculate();
void rdisplay();
};
```

- Which type of inheritance is shown in the above snippet?
- Write the visibility mode of class marks and result
- Name the base classes and derived classes in the above snippet

**Ans:**

- Multilevel inheritance
- class marks-private,result-public
- class personal-base class  
class marks,class result-derived class