**Practical no.-**18

**Program no.-** 03

**Title:** Program to find area of geometrical shapes using function overloading

**Roll No.:** 72 **Batch-** C

**Code:**

#include <iostream>

#include <math.h>

using namespace std;

//Program to find area of circle

float area(float r)

{

float ar;

ar=3.14\*r\*r;

return ar;

}

//Program to find area of square

int area(int s)

{

int ar;

ar=s\*s;

return ar;

}

//Program to find area of rectangle

float area(float l,float b)

{

float ar;

ar=l\*b;

return ar;

}

//Program to find area of triangle

float area(float a,float b,float c)

{

float ar,s;

s=(a+b+c)/2;

ar=sqrt(s\*(s-a)\*(s-b)\*(s-c));

return ar;

}

//main function

int main()

{

float r,ar,a,b,c,l;

int s,Area;

cout<<"Enter radius of Circle:"; cin>>r;

ar=area(r);

cout<<"Area of Circle:"<<ar;

cout<<"\n\nEnter side of Square:"; cin>>s;

Area=area(s);

cout<<"Area of Square:"<<Area;

cout<<"\n\nEnter length & breadth of Rectangle:"; cin>>l>>b;

ar=area(l,b);

cout<<"Area of Rectangle:"<<ar;

cout<<"\n\nEnter 3-sides of Triangle:";

cin>>a>>b>>c;

ar=area(a,b,c);

cout<<"Area of Triangle:"<<ar;

return 0;

}

**OUTPUT-**

Enter radius of Circle:5

Area of Circle:78.5

Enter side of Square:4

Area of Square:16

Enter length & breadth of Rectangle:3.6 2.4

Area of Rectangle:8.64

Enter 3-sides of Triangle:5.2 1.3 4.5

Area of Triangle:2.63249

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