

Practical 13[A]

1. What is the output of following program ?

Import math

Method	Description	Program	Output
sqrt()	Return x factorial as an integer. Raises ValueError if x is not integral or is negative.	print(math.sqrt(25))	5.0
pi()	math.pi constant returns the value of Pi: 3.141592653589793.	print(math.pi)	3.14159265358979
degrees()	Converts an angle from radians to degrees.	print(math.degrees(2))	114.591559026165
radians()	Convert angle x from degrees x by y	print(math.radians(30))	0.523598775598299
sin()	Returns the sine of x in Radians	print(math.sin(2))	0.909297426825682
cos()	Returns the cosine of x in Radians	print(math.cos(0.5))	0.877582561890373
tan()	Returns the tangent of x in radians	print(math.tan(0.23))	0.234143362351465
factorial()	Returns factorial of x	print(math.factorial(4))	24

2. What is the Output of the following program?

import random

Method	Description	Program	Output
randint()	Return a number between first and second value	print(random.randint(16,25))	25
random()	Return random number between 0.0 and 1.0:	print(random.random())	0.012530017676771
		print(random.random()*100)	31.2729621810566
choice()	Returns a randomly selected element from the specified sequence.	List = [1,4,800,"Akshay",16,25,"Gade"] print(random.choice(List))	Akshay

3. What is the output of the following program?

```
from datetime import date
import time
```

Method	Description	Program	Output
time()	Returns the time as a floating point number expressed in seconds since the epoch, in UTC.	print(time.time())	1653707356.96703
fromtimestamp() ()	The fromtimestamp() function is used to return the date corresponding to a specified timestamp.	print(date.fromtimestamp(454554))	1970-01-01

Que .) Write a python program that will display Calender of given month using Calender Module.

```
import calendar

year = int(input("Enter Year"))
month = int(input("Enter Month"))

print(calendar.month(year,month))
```

Output :

```
Enter Year 2003
Enter Month 8

      August 2003
Mo Tu We Th Fr Sa Su
      1  2  3
 4  5  6  7  8  9 10
11 12 13 14 15 16 17
18 19 20 21 22 23 24
25 26 27 28 29 30 31
```

Que.) Write a python program that will calculate area and circumference of circle using inbuilt Math Module

```
import math

radius = float(input("Enter radius of the circle : "))

print("Area of the circle = ", math.pi * radius ** 2)
print("Circumference of the circle = ", 2 * math.pi*radius)
```

Output :

```
Enter radius of the circle : 16
Area of the circle = 804.247719318987
Circumference of the circle = 100.53096491487338
```