

SAMPLE PAPER
Half Yearly Exam-2018
CLASS-XI

SUB: COMPUTER SCI

M.M:70

Que: 1

- a) Differentiate interactive mode and script mode in python? [1]
- b) What does a cross platform language mean, is python cross platform lang. [1]
- c) How many types of strings are supported in python explain with example of each. [1]

Que: 2

- a) How variable is differ than identifier [1]
- b) What are variables? How we can create variable in python give examples. [1]
- c) The following code is not giving desired output. We want to input value as 20 and obtain output as 40. Identify the problem and do the required correction in the code [1]

```
x=input("Enter number :")  
y = x*5
```

```
print(y)
```

- d) What will be the output of the following code? [1]

```
x, y =2, 5  
x, y =y, x+2  
  
print(x, y)
```

- e) Predict the output? [2]

```
x =15  
  
x= x+10  
  
x=x-5  
  
print(x)  
  
x,y = x-2 , 22
```

- f) Define identifiers. Identify the valid and invalid identifiers in the following list. [2]

i) x_y125z ii) _abc@5 iii) abc_d53 iv) break

- g) Write a program in python to obtain three numbers and print their sum and average .[2]

- h) Write a program in python to enter the temperature in Celsius and convert it in to Fahrenheit.[2]

Que:3

- a) Explain the use of %(modulus) operator and = = operator with example. [1]
- b) Explain mutable and immutable data types in python. [1]
- c) Identify the type of following literals? [2]
 - i) 23.5789 ii) 237895 iii) True iv) 0XFACE

- d) Explain type casting and its type with examples. [2]
 e) What are comments? How comments are specified in python give example. [2]
 f) Write the equivalent python expression for the following expressions. [2]
 i) $\sqrt{a^2+b^2+c^2}$ ii) $(p + q) / (r+s)^4$

- g) What will be the output produced by following code? [2]
`a,b,c,d =9.2 , 2.0 , 4 , 21`
`print (a/5)`
`print(a//4)`
`print(b**c)print(a%c)`

- h) Define operators in python. Explain about relational and logical operators with example. [3]

Que:4

- a) Write a program to find the greatest among three numbers and draw its flow chart. [3]
 b) Write a program in python to calculate the telephone bill of a customer based on the following criteria. [3]
 i. For the first 100 calls the minimum bill amount is 100 Rs.
 ii. For the next 40 calls Rs. 0.40 per call will be charged extra.
 iii. For the next 60 calls Rs. 0.50 per call will be charged extra.
 iv. For the calls beyond 200 Rs. 0.60 per call will be charged extra.
 c) Write a program in python to find the roots of a quadratic equation ax^2+bx+c . [3]
 d) Write a program in python to perform arithmetic operations (+, -, *, /, %). [2]
 e) Write a program in python to enter a number and print whether it is an even number or an odd number. [2]

Que:5

- a) Write a program in python to print the Fibonacci series up to n terms. [4]
 0 1 1 2 3 5.....n
- b) Write a program to find the sum of even numbers and odd numbers between 1 to n separately. [3]
 c) Write a program in python to print the sum of following series. [3]
 $1+ X+ X^2 +X^3 +.... + X^n$
- d) Define entry controlled loop in python with example. [2]
 e) Rewrite the following program using for loop. [2]

```
i=100
while(i>0):
    print(i)
    i-=3
```

Que:6

- a) Explain different types of errors in python with examples. [3]
 b) Write the differences between testing and debugging. [1]

Que:7

- a) Write a program that reads a string and display it in reverse order. [2]
- b) What is the use of islower() and isalnum() methods in python explains with example.[2]
- c) What is string slice? find the output of following python code : [2]
- ```
Str=" python program"
Str[2:5]
Str[:6]
```
- d) Write a program to search for an element in a given list of numbers. [2]
- e) What is list data type in python? [2]