

Blue Print of Weekly Test

Class XI

Subject : Computer Science

S. NO	Types of Ques	No. Of Ques	Marks for each Ques	Total Marks
1	V. short ans type ques	4	1	4
2	Short ans type ques	7	2	14
3	short programs	8	3	24
((including error and output question)				
5	Long Programs	2	4	8

Total Marks: 50

DELHI PUBLIC SCHOOL, BAHDURGARH **First Terminal Exam Sample paper**

Class: XI

M.M:70

Max. Time: 3 hrs

Sub:Computer Science

No. Of Pages: 2

Instructions:

- 1. Attempt all the questions.***
- 2. Marks are indicated against each question.***
- 3. Attempt the paper neatly and sketch the line after completing each part.***

Q-1

[22]

- a) What do you mean by Softwares? Draw the softwares classification chart. [2]
- b) Identify and discuss characteristics and uses of [2]
 - a. Personal Digital computers
 - b. Embedded Computers

- c) Draw the block diagram of the physical IOCS. [2]
- d) Differentiate between [2*4=8]
- Utility and customized software
 - Assembler and interpreter
 - Disk compressor and Disk defragmenter
 - Preemptive Scheduling and Non Preemptive Scheduling
- e) Convert the following : [2*3=6]
- $(77.75)_8$ to $()_2$
 - $(10100.0101)_2 = (?)_{16}$
 - $(EB4A)_{16} = ()_{10}$
- f) Find the eight bit two's complement form of the given decimal numbers [2]
- 96
 - 87

- Q-2** [15]
- Evaluate $c = a++ + ++b$ if $a=10$ and $b=5$ initially. [1]
 - What do you mean by primary memory? Name its two types. [2]
 - Define tokens in python? Name any two tokens of python. [2]
 - What are Literals? Give any two examples of it? [2]
 - What do you mean by functions? Explain its types. [1+2=3]
 - Differentiate between parameters and arguments. [2]
 - What do you mean by a variable? How it is initialized in python? [2]
 - Differentiate between `input()` and `raw_input()` with examples? [2]

- Q-3** [15]
- Evaluate the following expressions: [1.5*2=3]
 - $x-y < z \ \&\&y+z > x \ ||x-z \leq y - x + z$ if $x=5$, $y=7$ and $z=12$
 - $F=(b++)*a -b + ++a$ if $a=2$, $b=3$
 - Differentiate between pre decrement operator and post decrement operator? Give suitable example for each. [2]
 - Discuss the role and importance of logical operators? Name all logical operators. [2]
 - What is the difference between single line string and multi line string? Explain by giving examples in python? [2]
 - What is the difference between Type casting and type promotion? Give examples. [3]
 - Write any three differences between mutable and immutable datatypes. [3]

- Q-4 Write the given Programs in Python.** [18]

- a) WAP to find the first five multiples of a given number. Write separate UDF of it. [4]
- b) WAP to compute the series $1+x^2+x^3+x^4+x^5$ [4]
- c) WAP in python to find the percentage of a student after asking the marks in 5 subjects. Assign the grade according to the given pattern. [5]
- | | |
|----------------------------------|-----------|
| Per ≥ 90 and per ≤ 100 | grade='A' |
| Per ≥ 80 and per < 90 | grade='B' |
| Per ≥ 70 and per ≤ 60 | grade='C' |
| Per < 60 | grade='D' |
- d) WAMDP to find the maximum and minimum number out of the given number. Write separate UDF for maximum and minimum. [5]

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DELHI PUBLIC SCHOOL, BAHDURGARH
Final Exam Sample Paper 1

Class: XI

M.M:70

Max. Time: 3 hr

Sub: Computer Science

No. of pages:2

Instructions:

4. *Attempt all the questions.*
5. *Marks are indicated against each question.*
6. *Attempt the paper neatly and sketch the line after completing each part.*

Q-1

[22]

- f) Write any two advantages of Python language. [1]
- g) Write any one difference between interpretation and compilation. [1]
- h) Python is a free and open source language. What do you understand by this feature? [1]
- i) What is case sensitive feature? Is python case sensitive language? [.5+.5=1]
- j) Define the given token- keywords [1]
- k) What is the difference between “\n” and “\t” in Python. [.5+.5=1]
- l) Draw a flowchart to find the sum of first 20 natural numbers. [2]
- m) Differentiate between the following. Write any two points. [2*3=6]

- a. Comments and indentation
- b. Logical error and syntax error
- c. Adaptive maintenance and preventive Maintenance
- n) Solve the following by writing python program code : [2*3=6]
 - a. To calculate area of triangle having length 20, breadth 25 and height 30.8cm.
 - b. To calculate perimeter of rectangle by assuming required values.
 - c. To obtain temperature in Celsius and convert n Fahrenheit using formula $c*9/5+32=F$.
- f) What is string and how to create multiline string in Python? [1+1=2]

Q-2

[15]

- i) What is the output of the following code? [1+1=2]
 - 1)

```
x , y = 2 , 6
x , y=y , x+2
print x,y
```
 - 2)

```
R= 2.5 + 3.9j
Print R.real
Print R.imag
```
- j) What is the difference between '/' and '/' operators in python. Explain with example. [1]
- k) What will be the output of following statement when the inputs are: [1]
 - a.

```
A=10, b=23,c=23
```

```
Print a < b < = c
```
- l) What is type conversion(coercion)? How does python perform it? [2]
- m) What do you mean by pure arithmetic Expression? Give one example of it. [2]
- n) What do you understand by the term 'immutable' in python? Give example. [1+1=2]
- o) How len() function is used in python? Explain with example? [1+1=2]
- p) How many key attributes are associated with each python object? Explain all with example? [1+2=3]

Q-3

[15]

- g) What will be the output of the following code: [1*2=2]
 - a.

```
D=3+ 5/8
```

```
print D
```
 - b.

```
Unicode (0)
```
- h) Reema is confused between $a+b$ and $a+=b$. Help her to know the difference between two expressions. [1]
- i) Evaluate and justify the statement in python:

```
false AND 23
```

[1]
- j) What is the difference between a)20 and 20 L b) 'a' and u'a' ? [1+1=2]
- k) Define function in python and explain its types. [1+2=3]
- l) What is the purpose of namespace in python? [1]
- m) What is the utility of python standard library's math module and random module? [2]
- n) Write any one difference between string and list. [1]

- o) Which names are local, which are global and which are built in function in the following code fragment? [2]

```
Invaders= 'big names'
P= 200
Level=1
Def play( ) :
    Max_level = level + 10
    Print len( invaders ) == 0
    return Max_level
```

```
res=play ( )
```

```
print res
```

Q-4 Write the following programs.

[18]

- e) WAUDF in Python which receives two string arguments and checks whether they are same length strings or not . It should return 1 in case of true otherwise 0. [2]
- f) WAP in Python which reads a number as argument and calculates cube for it. The function does not return a value. If there is no value passed to the function call, the function should calculate cube of 2. It means default parameter value is 2. [2]
- g) WAP to print which reads a character and checks and prints whether it is digit, upper case or lowercase character. [2]
- h) WAP in python to evaluate the given sequence: [2]

$x - 2x/2! + 3x/3! - 4x/4! + \text{-----} n \text{ terms}$

- i) WAP which reads a string and checks its for palindrome. [2]
- j) WAMDP in python to read a number and find its factorial and sum of digits of that number according to user's choice. [4]
- k) WAMDP which performs the addition , deletion ,sorting and modifying operation in a given list according to users choice. [4]

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DELHI PUBLIC SCHOOL, BAHDURGARH
Final Exam Sample Paper 2

Class: XI

M.M:70

Max. Time: 3 hr

Sub: Computer Science

No. of pages:2

Instructions:

7. *Attempt all the questions.*
8. *Marks are indicated against each question.*
9. *Attempt the paper neatly and sketch the line after completing each part.*

Q-1

[22]

- o) Write any two disadvantage of Python language. [1]
- p) "Python is an interpreted high level language". What does it mean to you? [1]
- q) What does a cross platform means? [1]
- r) Define the given token- Literals [1]
- s) What is case sensitive feature? Is python case sensitive language? [1]
- t) What is the difference between "\b" and "\t" in Python. [1]
- u) Draw a flowchart to find the sum of first 50 natural numbers. [2]
- v) Differentiate between the following. Write any two points. [2*3=6]
 - a. Comments and indentation
 - b. Compile error and syntax error
 - c. Flow chart and algorithm
- w) Solve the following by writing python program code : [2*3=6]
 - a. To calculate area of triangle having length 30, breadth 55 and height 20.8cm.
 - b. To obtain temperature in Fahrenheit and convert in Celsius using formula $c*9/5+32=F$.
 - c. To calculate Simple Interest by assuming required values.
- f) What is string and how to create multiline string in Python? [1+1=2]

Q-2

[15]

- q) What is the output of the following code? [1+1=2]
 - 3)

```
x , y = 4 , 6
x , y=y , x+4
print x , y
```
 - 4)

```
R= 3.5 + 3.9j
Print R.real
Print R.imag
```
- r) What is the difference between "*" and "***" operators in python. Explain with example.[1]
- s) What will be the output of following statement when the inputs are: [1]
 - a. A=15, b=33,c=23 Print a < b <= c
- t) What is type casting? How does python perform it? [2]

- u) What do you mean by mixed arithmetic Expression? Give one example of it. [2]
- v) What do you understand by the term 'mutable' in python? Give example. [1+1=2]
- w) How type() function is used in python? Explain with example? [1+1=2]
- x) What are formal and actual arguments? Explain with example? [1+1+1=3]

Q-3

[15]

- p) What will be the output of the following code: [1*2=2]
 - a. C=3+float(5/8) print C
 - b. Unicode (true)
- q) Seema is confused between a*b and a*=b. Help her to know the difference between two expressions. [1]
- r) Evaluate and justify the statement in python: True AND 55 [1]
- s) What is the difference between a)50 and 50 L b) 'd' and u'd' ? [1+1=2]
- t) Define user defined functions in python and explain with syntax and example. [1+2=3]
- u) What is the utility of python standard library's math module and random module? [2]
- v) What is the purpose of Dictionary in python? [1]
- w) Write any one difference between Tuple and list. [1]
- x) Which names are local, which are global and which are built in function in the following code fragment? [2]


```
Inc= 'small names'
Pin= 500
L=1
Def play( ) :
    Max_level = L + 10
    Print len( inc ) == 0
    return Max_level

result=play ( )

print result
```

Q-4 Write the following programs.

[18]

- l) WAUDF in Python which receives two string arguments and finds the length of both strings. Display the total length of both strings. If it is greater than 10 then return 1 otherwise 0. [2]
- m) WAP in Python which reads a number as argument and calculates square for it. The function does not return a square value. If there is no value passed to the function call, the function should calculate cube of 2. It means default parameter value is 2. [2]

- n) WAP to print which reads a string and prints total number of digit, upper case or lowercase characters given in a string. [2]
- o) WAP in python to evaluate the given sequence: [2]
- 1- $x/2! + x/3! - x/4! + \dots$ n terms
- p) WAUDF which takes a string as argument and checks its for palindrome. If it is palindrome then return 1 else 0. [2]
- q) WAMDP in python to read a number and find its factorial and display fibonacci series till n no of terms according to user's choice. [4]
- r) WAMDP which performs the deletion ,sorting and modifying operation in a given list according to users choice. [4]

X

X

