## Home work for Autumn break

## CLASS: XI, COMPUTER SCIENCE

Q1 (i) Draw a flowchart to find the minimum of three numbers..
(ii) Write full form of following

1) $B C D$
2) GB

Q2 (i) Which of the following identifiers are valid? Give reasons, if invalid:
(ii) ) Write the corresponding Python expressions for the following mathematical expressions:

$$
\begin{aligned}
& \sqrt{ } a^{2}+b^{2}+c^{2} \\
& 5 x^{4}+3 y^{2}+9
\end{aligned}
$$

(iii) From the following, find out the valid identifier:
_xyz_e, if, 1efg, abc98, x1y2cz,_fghd, abd.fik, 5j, '15', (5,10,15), \{"one": "Delhi", "two":
"Mumbai"\}, INFO-PR, MYFILE, , while, comp_sc
Q3 : What will be the output of the following code :

$$
\begin{aligned}
& a=3+5 / 8 \\
& b=\operatorname{int}(3+5 / 8) \\
& c=33 / / 5 \\
& d=33 \% 5 \\
& \text { print }(a, b, c, d)
\end{aligned}
$$

(ii) Predict the output of the following code snippet:

Dict= \{ 'A' : 1, 'B' : 2, 'C' : 10 , 'D' :20\}
temp=5;
for value in Dict.values( ):
temp += value
print (temp)
(iii) What will be the output produced by following code fragment?

$$
\begin{aligned}
& x, y=20,60 \\
& y, x, y=x, y-10, x+10 \\
& \text { print }(x, y)
\end{aligned}
$$

(iv) Find out the output of following code segment:

```
A,B,C=9,12,13
X=A-B/3+C*2-1
Y=A-B/(3+C)* (2-1)
Z=A-(B/(3+C)*2)-1
print("X=",X)
print("Y=",Y)
print("Z=",Z)
```

(v) What will be the output produced by the following code fragment:
(a) name = " Neeru"

```
age= 17
print (name, "Hello")
print ("You will be", age +1, " next year")
\[
i=1
\]
    while i < 10
                                    print(i)
                                    i += 2
```

(b)
(vi) What will be the output of the following code and why?

```
\(a, b, c=0.1\)
\(\mathrm{d}=0.3\)
\(e=a+b+c-d\)
\(f=a+b+c==d\)
print(e)
print(f)
```

(vii) What will be the output of following Python code?
$\mathrm{x}=10$
$x=x+15$
$\mathrm{x}=\mathrm{x}-5$
print( $x$ )
$x, y=x-2,22$
(viii) What is the output of the following lines of code?
if int('zero') == 0 :
print("zero")
elif $\operatorname{str}(0)==$ 'zero':
print (0)
elif $\operatorname{str}(0)==0$ ':
print $(\operatorname{str}(0))$
else:
print('none of the above')
(ix) What is the output of the following lines of code?
a,b,c,d =9.2, 2.0, 4, 21
print (a/2)
print(a//4)
print( $b^{* *} c$ )
print(a\%c)
(x) What is string slice? find the output of following python code :

Str=" python program"
Str[2:5]
Str[:6]
(xi) What value will be stored in "res" variable after executing each of the following expressions?
i. res $=7 / / 3$
ii. res $=49.0^{* *} 0.5$
iii. res $=6 \% 4$
iv. res= True and False
(xii) How String data type is different from List data type? Predict the output of the following code snippet:

```
>>>a \(=[5,10,15,20]\)
>>>a[2] \(=a[1]+5\)
>>> a[3] =a[0]
>>> print(a)
```

(xiii) Write the output of the following code snippet:

```
hi ='UnderTaker'
bye ='OverTaker'
print ( hi [ -6:-3 ] + bye [ \(2: 5\) ] )
```

(xiv) Predict the output of following code snippet:
for $x$ in $[6,7,8]$ :
for $y$ in $[4,5,6]$ :
print $(x, y)$
(xv) Write the output for the following Python codes.
$A=\{1: 100,2: 200,3: 300,4: 400,5: 500\}$
print(A.items())
print(A.keys())
print(A.values())
Q4: (i) Rewrite the code in Python after removing all syntax error(s). Underline each correction done in the code

TEXT=""GREAT
DAY"'"
for $T$ in range[0,7]:
print TEXT(T)
print T+TEXT
(ii) Write a Python script to print Fibonacci series' first 20 elements. Some initial elements of a Fibonaci series are:

0112358 $\qquad$

