## K V CRPF,MUDKHED

XII Computer Science Holiday HW PART-1

| $\begin{aligned} & \hline \mathrm{Q} \\ & \text { No. } \end{aligned}$ | Question |
| :---: | :---: |
| 1 | State True or False <br> "Tuple is datatype in Python which contain data in key-value pair." |
| 2 | Which of the following is not a keyword? <br> (A) eval <br> (B) assert <br> (C) nonlocal <br> (D) pass |
| 3 | Given the following dictionaries <br> dict_student = \{"rno" : "53", "name" : ‘Rajveer Singh’\} <br> dict_marks = \{"Accts" : 87, "English" : 65\} <br> Which statement will merge the contents of both dictionaries? <br> (A) dict_student + dict_marks <br> (B) dict_student.add(dict_marks) <br> (C) dict_student.merge(dict_marks) <br> (D) dict_student.update(dict_marks) |
| 4 | Consider the given expression: <br> not ((True and False) or True) <br> Which of the following will be correct output if the given expression is evaluated? <br> (A) True <br> (B) False <br> (C) NONE <br> (D) NULL |
| 5 | Select the correct output of the code: <br> >>> s='mail2kv@kvsangathan.kvs.in' <br> >>> s=s.split('kv') <br> >>> op = s[0] + "@kv" + s[2] <br> >>> print(op) <br> (A) mail2@kvsangathan <br> (B) mail2@sangathan. <br> (C) mail2@kvsangathan. <br> (D) mail2kvsangathan. |
| 6 | Which of the following statement(s) would give an error after executing the following code? |
| 7 | What will the following expression be evaluated to in Python? print (round (100.0/4+(3+2.55), 1 ) ) <br> (A) 30.0 <br> (B) 30.55 <br> (C) 30.6 <br> (D) 31 |


| 8 | (A) Given is a Python string declaration: message='FirstPreBoardExam@2022-23' <br> Write the output of: print(message[ : : -3].upper()) <br> (B) Write the output of the code given below: d1=\{'rno':25, 'name':'dipanshu'\} <br> d2=\{'name':'himanshu', 'age':30,'dept':'mechanical'\} <br> d2.update(d1) <br> print(d2.keys()) |
| :---: | :---: |
| 9 | Predict the output of the Python code given below: $\begin{aligned} & \text { data=["L",20,"M",40,"N",60] } \\ & \text { times=0 } \\ & \text { alpha="" } \\ & \text { add=0 } \end{aligned}$ <br> for $c$ in range (1,6,2): <br> times $=$ times $+c$ <br> alpha = alpha + data [c-1] + "@" <br> add = add $+\operatorname{data}[c]$ <br> print (times, add, alpha) |
| 10 | Predict the output of the Python code given below: ```L=[1,2,3,4,5] Lst=[] for i in range(len(L)): if i%2==1: t=(L[i],L[i]**2) Lst.append(t) print(Lst)``` |
| 11 | Find the invalid identifier from the following <br> a) Marks@12 <br> b) string_12 <br> c)_bonus <br> d) First Name |
| 12 | Identify the valid declaration of Rec: <br> Rec=(1,"Ashoka",50000) <br> a) List <br> b) Tuple <br> c) String <br> d) Dictionary |
| 13 | Suppose a tuple Tup is declared as $\operatorname{Tup}=(\mathbf{1 2}, \mathbf{1 5}, \mathbf{6 3}, \mathbf{8 0})$ which of the following is incorrect? <br> a) $\operatorname{print(Tup[1])}$ <br> b) Tup[2] $=90$ <br> c) $\operatorname{print}(\min ($ Tup $))$ <br> d) $\operatorname{print(len(Tup))~}$ |
| 14 | The correct output of the given expression is: <br> True and not False or False <br> (a) False <br> (b) True <br> (c) None <br> (d) Null |


|  | $\mathrm{t} 1=(2,3,4,5,6)$ <br> print(t1.index(4)) <br> output is <br> (a) 4 <br> (b) 5 <br> (c) 6 <br> (d) 2 |
| :---: | :---: |
| 15 | Which of the following statement(s) would give an error after executing the following code? $x=\operatorname{int}($ "Enter the Value of $x: "))$ \#Statement 1 <br> for $y$ in range[0,21]: \#Statement 2 <br> if $x==\mathrm{y}$ : \#Statement 3 <br> print ( $\mathrm{x}+\mathrm{y}$ ) \#Statement 4 <br> else: \#Statement 5 <br> print ( $x-y$ ) \# Statement 6 <br> (a) Statement 4 <br> (b) Statement 5 <br> (c) Statement 4 \& 6 <br> (d) Statement 1 \& 2 |
| 16 | (a) Given is a Python string declaration: <br> str="Kendriya Vidyalaya Sangathan" <br> Write the output of: print(str[9:17]) <br> (b) Write the output of the code given below: <br> Ist1 $=[10,15,20,25,30]$ <br> Ist1.insert( 3, 4) <br> Ist1.insert( 2, 3) <br> print (Ist1[-5]) |
| 17 | Evaluate the following Python expression <br> print(12*(3\%4)//2+6) <br> (a) 12 <br> (b) 24 <br> (c) 10 <br> (d) 14 |
| 18 | Fill in the Blank <br> The explicit conversion of an operand to a specific type is called $\qquad$ <br> (a)Type casting <br> (b) coercion <br> (c) translation <br> (d) None of these |
| 19 | Which of the following is not a core data type in Python? <br> (a) Lists <br> (b) Dictionaries <br> (c)Tuple <br> (d) Class |
| 20 | ```What will the following code do? dict=\{"Exam":"AISSCE", "Year":2022\} dict.update(\{"Year":2023\}) a. It will create new dictionary dict=\{" Year":2023\}and old dictionary will be deleted b. It will throw an error and dictionary cannot updated c. It will make the content of dictionary as dict=\{"Exam":"AISSCE", "Year":2023\} d. It will throw an error and dictionary and do nothing``` |
| 21 | What will be the value of the expression: $14+13 \% 15$ |
| 22 | Which of the following statement(s) would give an error after executing the following code? <br> S="Welcome to class XII" \# Statement 1 <br> print(S) \# Statement 2 <br> S="Thank you" \# Statement 3 <br> S[0]= '@' \# Statement 4 <br> S=S+"Thank you" \# Statement 5 <br> (a) Statement 3 <br> (b) Statement 4 <br> (b) Statement 5 <br> (d) Statement 4 and 5 |
| 23 | What will be the output of the following expression? <br> 24//6\%3, 24//4//2, 48//3//4 <br> a) $(1,3,4)$ <br> b) $(0,3,4)$ <br> c) $(1,12$, Error $)$ <br> d)(1,3,\#error) |
| 24 | Write the output of following code and explain the difference between a*3 and ( $\mathrm{a}, \mathrm{a}, \mathrm{a}$ ) $\begin{aligned} & a=(1,2,3) \\ & \operatorname{print}\left(a^{*} 3\right) \end{aligned}$ $\operatorname{print}(\mathrm{a}, \mathrm{a}, \mathrm{a})$ |
| 25 | Identify the invalid Python statement from the following. <br> (a) $\_b=1$ <br> (b) $\ldots \mathrm{b} 1=1$ <br> (c) $b_{-}=1$ <br> (d) $1=\_$b |
| 26 | Identify the valid arithmetic operator in Python from the following. <br> (a) // <br> (b) < <br> (c) or <br> (d) <> |
| 27 | If Statement in Python is |


|  | (a) looping statement (b) selection statement ${ }^{\text {a }}$ (c) iterative $\quad$ (d) sequential |
| :---: | :---: |
| 28 | Predict the correct output of the following Python statement - $\quad \operatorname{print}(4+3 * * 3 / 2)$ <br> (a) 8 <br> (b) 9 <br> (c) 8.0 <br> (d) 17.5 |
| 29 | Choose the most correct statement among the following - <br> (a) a dictionary is a sequential set of elements <br> (b) a dictionary is a set of key-value pairs <br> (c) a dictionary is a sequential collection of elements key-value pairs <br> (d) a dictionary is a non-sequential collection of elements |
| 30 | Consider the string state = "Jharkhand". Identify the appropriate statement that will display the last five characters of the string state? <br> (a) state [-5:] <br> (b) state [4:] <br> (c) state [:4] <br> (d) state [:-4] |
| 31 | What will be the output of the following lines of Python code? <br> if not False: <br> print(10) <br> else: <br> print(20) <br> (a) 10 <br> (b) 20 <br> (c) True <br> (d) False |
| 32 | ```Find error in the following code(if any) and correct code by rewriting code and underline the correction;- x= int("Enter value of x:") for in range [0,10]: if }x= print(x+y) else: print( x-y)``` |
| 33 | Find output generated by the following code: $\begin{aligned} & \text { Str = "Computer" } \\ & \text { Str = Str[-4:] } \\ & \text { print(Str*2) } \end{aligned}$ |
| 34 | ```Consider the following lines of codes in Python and write the appropriate output: student = {'rollno':1001, 'name':'Akshay', 'age':17} student['name']= "Abhay" print(student)``` |
| 35 | ```Find output generated by the following code: string="aabbcc" count=3 while True: if string[0]=='a': string=string[2:] elif string[-1]=='b': string=string[:2] else: count+=1 break print(string) print(count)``` |

Very Short Answer Type Questions (1 mark)

## Question 1.

Name the Python Library modules which need to be imported to invoke the following functions :

1. randint ()
2. power()

## Question 2.

Name the modules to which the following func-tions belong:

1. Uniform ()
2. fabs ()

Question 3.
Differentiate between the round() and floor() functions with the help of suitable example.
Short Answer Type Questions (2 marks):
Question 1.
Out of the following, find those identifiers, which cannot be used for naming Variables or functions in a Python program:
Total * Tax, While, Class, Switch, 3rd Row, finally, Column 31, Total. [CBSE Outside Delhi-2016]
Question 2.
Name the Python Library modules which need to be imported to invoke the follwing functions :

1. sqrt()
2. ceil()

## Question 3.

Out of the following, find the identifiers, which cannot be used for naming Variable or Functions in a Python program: [CBSE Delhi 2016]
_Cost, Price*Qty, float, switch, Address one, Delete, Number12, do
Question 4.
Out of the following find those identifiers, which can not be used for naming Variable or Functions in a Python Program:
Days * Rent, For, A_price, Grand Total, do, 2Clients, Participantl, My city
Question 5.
Name the function / method required for [CBSE SQP 2015]

1. Finding second occurrence of $m$ in madam.
2. get the position of an item in the list.

Question 6.
Which string method is used to implement the following:

1. To count the number of characters in the string.
2. To change the first character of the string in capital letter.
3. To check whether given character is letter or a number.
4. To change lowercase to uppercase letter.
5. Change one character into another character. [CBSE TextBook]

Question 7.
Why does the expression $2+3 * 4$ result in the value 14 and not the value 24 ?
Question 8.
How many times will Python execute the code inside the following while loop? You should answer the question without using the interpreter! Justify your answers.
$i=0$
while i < 0 and i > 2 :
print "Hello ..."
$i=i+1$

Question 9.
State whether the statement is True or False? No matter the underlying data type if values are equal returns true,
char ch1, ch2;
if (ch1==ch2)
print "Equal"

Question 10.
What is the difference between '/' and '//'?
Answer:
Question 11.
How can we import a module in Python? Give an example
Question 12.
What is the difference between parameters and arguments? Explain with example.
Question 13.
What are default arguments? Explain with example.
Question 14.
What are keyword arguments? Explain with example.
Question 15.
What is the difference between a tuple and a list? Explain with example.
Question 16.
Carefully observe the following python code and answer the question that follows:
$\mathrm{x}=5$
def func2():
$x=3$
global $x$
$x=x+1$
print $x$
print $x$
Questions 17. Explain the output with respect to the scope of the variables.
TOPIC - 2
Question 18.
Rewrite the following code in Python after removing all syntax errors(s). Underline each correction done in the code. [CBSE Delhi-2016]
for Name in [Amar, Shveta, Parag]
if Name [0] = 's':
Print (Name)
Question 19.
What would be the output of the following code snippets?
print 4+9
print "4+9"
Question 20.
What is the result of $4+4 / 2+2$ ?
Question 21.
Write the output from the following code: [CBSE Text Book]

```
x= 10
    y = 20
    if (x>y):
        print x+y
    else:
        print x-y
```

Question 22.
Write the output of the following code:
print "Python is an $\ln$ interpreted $\backslash t$ Language"
Question 23.
Write the output from the following code:

```
s = 0
    for I in range(10,2,-2):
        s+=I
    print "sum= ",s
```

Question 24.
Write the output from the following code
$n=50$
$i=5$
$\mathrm{s}=0$
while i<n:
$s+=i$
i+ = 10
print "i=",i
print "sum=",s
Question 25.
Observe the following Python code carefully and obtain the output, which will appear on the screen after execution of it. [CBSE SQP 2016]
def Findoutput ():
L = "earn"
$\mathrm{X}=$ " "
count $=1$
for i in L:
if i in ['a', 'e',' i', 'o', 'u']: $\mathrm{x}=\mathrm{x}+1$. Swapcase ()
elif (count \% 2 ! $=0$ ): $x=x+\operatorname{str}(\operatorname{len}(L[:$ count $]))$
else: $x=x+1$ count $=$ count +1
print x
Findoutput ()
TOPIC - 5
Short Programs
Question 26.
Write a program to calculate the area of a rectangle. The program should get the length and breadth ; values from the user and print the area using user defined function.

Question 27.
Write a program to calculate the roots of a quadratic equation using user defined function
Question 28.
Write a program to input username and password and to check whether the given username and password are correct or not.

Question 29.
Write a method in Python and display the prime numbers between 2 to N. Pass as argument to the methods.

