**Kendriya Vidyalaya**

**Session Ending Examination 2018**

**SUBJECT : INFORMATICS PRACTICES (065)**

Roll No :  Class : XI Marks : 70 Time Allowed : 3 Hrs

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| 1 i) | Why does a computer understand only binary language? | | [1] |
| ii) | Differentiate between RAM and ROM. | | [2] |
| iii) | Write one advantage and one disadvantage of python language | | [1] |
| iv) | Differentiate between interpreter and compiler. | | [2] |
| v)  vi) | Name two sub processing units of mobile processor.  Write any two rules for forming identifiers in Python. | | [2]  [2] |
|  |  | |  |
| 2 i) | What is the problem with the following code fragment?  a = 3  print(a)  b = 4  print(b)  s = a + b  print(s) | | [1] |
| ii) | What is the difference between a simple statement and a compound statement in Python? | | [1] |
| iii) |  | |  |
| iv) |  | | [2] |
| v) |  | | [2] |
| vi) | What are comments and how are they written in Python? | | [2] |
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| 3 i) | Predict the output of the following:  x , y = 20 , 60  y , x , y = x , y – 10 , x + 10  print( x , y ) | | [2] |
| ii) | Differentiate between mutable and immutable data types in Python. | | [2] |
| iii) | What is operator precedence?  If a = 5, b = -3, c = 25, d = -10  What will be the result of the following expression  a + b + c < a + c – b \* d | | [2] |
| iv) | Differentiate between implicit and explicit type conversion. | | [2] |
| v) | Write a program in Python to check if a number entered by the user as input is odd or even. | | [2] |
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| 4 i) | Write a program in Python to enter two numbers as input and print all the numbers between them as output | | [2] |
| ii) | What will be the difference in outputs of the following code fragments: | | [2] |
|  | for i in range(1,16)  if i % 3 == 0:  print (i,end="-") | for i in [1,16]:  if i % 3 == 0:  print (i,end="-") |  |
| iii) | Can we say that strings are character lists? Explain. | | [2] |
| iv) | Given a string s= “Kendriya Vidyalaya Sangathan”.  Write a code so that two new strings  s\_even=’ Knry iyly agta” and  s\_odd=” ediaVdaaaSnahn”  are created having alternate characters of s. | | [2] |
| v) | What will be the output produced by the following code fragment:  y=str(123)  x="Hello"\*3  print(x,y)  x,y=y,x  x=len(y)  print(x,y) | | [2] |
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| 5 i) | Give 2 differences between lists and strings. | | [2] |
| ii) | What will be the difference in outputs of the following code fragments?  L1=[1, 2, 3, 4, 5] L1=[1, 2, 3, 4, 5]  del L1[2:4] del L1  print (L1) print (L1) | | [2] |
| iii) | Given a list emp= ["Mr. Aman","Mr. Bhaskar","Mr. Chetan","Mr. Dinesh"]. Write a code to generate a new list emp1 from emp such that:  emp1= ['Aman', 'Bhaskar', 'Chetan', 'Dinesh'] | | [3] |
| iv) | Write a program which asks the user to input name of their school.  Then the program asks the user to input a character. If user enters  C 🡪 Program prints name of school in capital letters  S 🡪 Program prints name of school in small letters  Any other character : Program prints name of school as entered  e.g.  Enter name of your school: Kendriya Vidyalaya  Press C for Capital and S for Small letters:C  KENDRIYA VIDYALAYA | | [3] |
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| 6 i) | Write two differences between dictionaries and list. | | [2] |
| ii) | Which types of objects can be used as keys in a dictionary?  Why can’t lists be used a dictionary keys? | | [2] |
| iii) | Explain the difference between append(), extend() and insert() method of a list with suitable examples. | | [3] |
| iv) | Explain the difference between clear(), remove() and pop() method of a list with suitable examples. | | [3] |
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| 7 i) | The following code is giving some error. Find out the error and correct it.  d1={"a":1,1:"a",[1,"a"]:"two"}  print(d1) | | [1] |
| ii) | Predict the output of each of the following code fragments:   1. d1={5 : [ 6, 7, 8 ], “a” : ( 1, 2, 3) }   print( d1.keys( ))  print( d1.values( ))   1. a={(1, 2) : 1 ,(2,3) :2}   print(a[1,2]) | | [1]  [1] |
| iii) | What are docstrings? How are they useful? | | [2] |
| iv) | Write a user defined function in Python that accepts two numeric arguments and returns the larger number. | | [2] |
| v) | a) What are python modules?  b) Write the command to make a module called KvsPython available to our  program?  c) Suppose KvsPython has an object called Teacher in it. Write the  command to bring only the Teacher object into our program and not the  whole module | | [1]  [1]  [1] |