**KENDRIYA VIDYALAYA SANGATHAN, GUWAHATI REGION**

**HALF YEARLY EXAMINATION – 2018-19**

**SUB: INFORMATICS PRACTICES (065)**

**CLASS – XI**

TIME: 3 HRS. MAXIMUM MARKS: 70

Instructions: All questions are compulsory. Programming Language: Python

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| **1.** |  |  |
| **a)** | What is the role of CPU in a computer? | **1** |
| **b)** | What is system software? | **1** |
| **c)** | Explain the basic building block of a computer? | **2** |
| **d)** | Write brief description of evolution of computer from calculator | **2** |
| **e)** | Write brief description of mobile system working | **2** |
| **f)** | What is the role of memory in computer and types of memory | **2** |
| **2.** |  |  |
| **a)** | Who is the developer of Python Programming Language? | **1** |
| **b)** | Is python cross platform language,how? | **1** |
| **c)** | What is dynamic typing in python? | **2** |
| **d)** | Differentiate keyword and identifier. | **2** |
| **e)** | What are tokens in Python? | **2** |
| **f)** | How many types of literals are there in Python? | **2** |
| **3.** |  |  |
| **a)** | In how many different ways we can work of Python? | **1** |
| **b)** | Python is free and open source language. here, what is free and open source? | **1** |
| **c)** | Can you identify the data types of following values, if yes write their data type.  [4,5,2] , {2,34,5} , (4,23,55) , {33,4,4) | **2** |
| **d)** | What will be the output of the following code  print(5/2)  print(5//2) | **2** |
| **e)** | What will the output of following codes  print (8\*2 - 2\*4)  print (5//2+9\*4) | **2** |
| **f)** | Differentiate mutable and immutable data types with suitable example | **2** |
| **4.** |  |  |
| **a)** | What is the use of range() function in python? | **1** |
| **b)** | What are jump statements in python? | **1** |
| **c)** | What is entry control loop? | **1** |
| **d)** | What is empty statement? | **1** |
| **e)** | else clause is available with if as well as loop construct,can you differentiate the use of else in both. | **2** |
| **f)** | What is determinable and non-determinable loop in python? | **2** |
| **g)** | What is the output of the following program?  for i in [4, 3, 2, 1][::-1]:  print (i) | **2** |
| **h)** | What is the output of the following program?  x = 321  for i in x:  print(i) | **2** |
| **i)** | What is the output of the following?  i = 0  while i < 3:  print(i)  i += 1  else:  print(0) | **2** |
| **5.** |  |  |
| **a)** | Write difference between append() and extend() methods of list. | **1** |
| **b)** | How we can sort the elements of the list. | **1** |
| **c)** | Suppose list1 is [12, 323, 2322, 14, 25], What is list1[:-1] ? | **2** |
| **d)** | Suppose list1 is [9,1, 3, 2], What is list1 \* 2 ? | **2** |
| **e)** | What is the output of the following code?  a=[132,526,127]  a.append([827])  a.extend([425,627])  print(a) | **2** |
| **6.** |  |  |
| **a)** | What is string in python? | **1** |
| **b)** | Write a program in python to check if a Substring is Present in a Given String. | **2** |
| **c)** | What is the output of the following Python program section?  st='Computer Science'  x=st.lower()  y=x.replace('computer','Computer') | **2** |
| **d)** | Write a Python program to check whether a string starts with specified character | **2** |
| **7** |  |  |
| **a)** | Is dictionary more useful than list,if yes then how? | **1** |
| **b)** | Read the code shown below carefully and pick out the keys?  dict = {'freya':10, 'mohak':1} | **2** |
| **c)** | What is the output of the following snippet of code?  a={i: i\*i for i in range(6)}  print(a) | **2** |
| **d)** | What is the output of the following piece of code?  a={'B':5,'A':9,'C':7}  b=sorted(a)  print(b) | **2** |
| **e)** | Slicing/concatenation is applicable over dictionary? | **2** |
| **f)** | How are modules used in a Python program? | **2** |