

VI SEMESTER B.TECH.

END SEMESTER EXAMINATION – APRIL/MAY 2019

(REVISED CREDIT SYSTEM)

SUBJECT: AN INTRODUCTION TO INTERACTIVE PROGRAMMING IN PYTHON

[CRA 4013]

1A. How do you define a function in Python? Write a function to calculate the sum of the digits in an integer. If a function contains no return statement, what value does the function return?(5)

1B What is the use of range() method? Explain with an example.(3)

2A What do you mean by a class? How do you create instances of a class? Explain the purpose of the __init__ method in a class. Illustrate with an example.(5)

2B Differentiate between local variables and global variables in Python. Illustrate with an example.(3)

2C How do you load an image using simplegui? Give an example.(2)

3A What is a dictionary? Explain the method of iterating over the elements of a dictionary. Give an example.(5)

3B What is the difference between list and tuple? Illustrate with an example.(3)

3C How do you define and use a label in python?(2)

4A Write a program in Python to input the marks scored by a student in three subjects, calculate the total and average marks and grade the student based on the following criteria.(5)

4B What are the three parts of a frame? Explain.(3)

4C What are mutable and immutable objects in python?(2)

5A What do you mean by event-driven programming? Explain the method of implementing it in Python.(5)

5B Write the syntax of the while looping structure and explain it's working. Write Python code segment to print the numbers from 1 to 10 using a while loop.(3)

5C Given the strings s1 = "Python" and s2 = "Programming", write the outputs of the following statements:

a) print s1[-1]

b) print s2[:5]

c) print s1[3:]

d) print s1[2:3] + s2[0] (2)