

C. U. SHAH UNIVERSITY**Summer Examination-2020**Subject Name: **Python Programming**Subject Code: **5CS05MPY1**Branch: **M. C. A.**Semester : **5**Date : **26/02/2020**Time : **10:30 To 01:30**Marks : **70****Instructions:**

- (1) Use of Programmable calculator and any other electronic instrument is prohibited.
- (2) Instructions written on main answer book are strictly to be obeyed.
- (3) Draw neat diagrams and figures (if necessary) at right places.
- (4) Assume suitable data if needed.

SECTION-I**Q. 1 Answer the following questions. 07**

- (a) When should we use """" (tripe quotes) to define strings? **02**
- (b) What does range(1, 10, 2) return? **02**
- (c) What is the difference between 10 / 3 and 10 // 3? **02**
- (d) Show the result of this expression: "*" * 10. **01**

Q. 2 Attempt all questions.

- (a) What are the built-in type does python provides? Explain by example. **07**
- (b) Write note on the key features of Python. **07**

OR**Q. 2 Attempt all questions.**

- (a) What is List? What are the differences between Python Arrays and lists? **07**
- (b) Explain functions in Python. **07**

Q. 3 Attempt all questions.

- (a) How do you write comments in python? How to comment multiple lines in python? **07**
- (b) Describe the **is** and **is not** operators and type() function. Also, discuss why Python is called as dynamic and strongly typed language. **07**

OR**Q. 3 Attempt all questions.**

- (a) Write a command to read (Assume the file name is "students.txt"): **07**
 - a. Read entire file
 - b. '20' characters from a file
 - c. Write output after executing both commands together.
- (b) Write a function called **showTriangle(N)**. If N is 4, it should print the following: **07**

```

*#
*# *#
*# *# *#
*# *# *# *#

```



SECTION-II

- Q. 4 Answer the following questions.** **07**
- (a) What is the use of pass statement in Python? **02**
 - (b) What do you mean by Slicing in Python? **02**
 - (c) Mention what are the rules for local and global variables in Python? **02**
 - (d) Is python case sensitive? **01**
- Q. 5 Attempt all questions.**
- (a) Enlist the looping structures supported by Python. Explain any one with example. **07**
 - (b) Explain ternary operators in Python. **07**
- OR**
- Q. 5 Attempt all questions.**
- (a) What are the two types of files? Explain different file operations. **07**
 - (b) What is a dictionary in Python? **07**
- Q. 6 Attempt all questions.**
- (a) Explain in detail about conditional statements used in python. **07**
 - (b) List some common datatypes used in Python. What is the difference between input() and raw_input()? Explain with example. **07**
- OR**
- Q. 6 Attempt all questions.**
- (a) Write a Python GUI program to import Tkinter package and create a window. Set its title and add a label to the window **07**
 - (b) Write a function called **showNumbers** that takes a parameter called limit. It should print all the numbers between 0 and limit with a label to identify the even and odd numbers. For example, if the limit is 3, it should print:
0 EVEN
1 ODD
2 EVEN
3 ODD **07**

