

B.Sc. - III (Information Technology) (CBCS Pattern) Semester-VI  
**004 / UBITT603.1 - Paper-III - Elective-I : Python Programming**

P. Pages : 2

Time : Three Hours



**GUG/S/25/13315**

Max. Marks : 40

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- Notes :
1. All the questions are compulsory and carry equal marks.
  2. Draw neat and labelled diagram whenever necessary.
  3. Avoid vague answer and write specific answer related to question.

**Either:**

1. a) What is python? Explain its key features. 4
- b) Describe the basic syntax rules of python. 4

**OR**

- c) What are basic data types in python? Explain with example. 4
- d) Demonstrate the use of multiple input and output statements in python. 4

**Either:**

2. a) Concept of type conversion in python. 4
- b) What are conditional statements in python? Explain their importance.. 4

**OR**

- c) What is the difference between for and while loops in python. 4
- d) How do you declare and initialize a string in python. 4

**Either:**

3. a) Describe the advantages of using functions in python. 4
- b) What is the difference between formal and actual parameters? Explain with an example. 4

**OR**

- c) What do you mean by anonymous function in python? Explain with example. 4
- d) Explain Math module in python with example. 4

**Either:**

4. a) What do you mean by exception in python? Explain with an example. 4
- b) Differentiate between syntax error and runtime exceptions. 4

**OR**

- c) How are classes and objects defined in python. 4
- d) What is inheritance in python? Explain different types of inheritance. 4
5. Solve all the questions.
- a) Demonstrate the different arithmetic operations in python. 2
- b) Write a python program to demonstrate range function. 2
- c) What is module in python? Explain its benefits. 2
- d) Describe the concept of encapsulation in python. 2

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