

**Exam. Code : 105703**

**Subject Code : 1459**

**B.Sc. Information Technology 3<sup>rd</sup> Semester**

**INTRODUCTION TO PYTHON**

**Paper—I**

Time Allowed—Three Hours] [Maximum Marks—75

**Note** :—Attempt **FIVE** questions, selecting at least **ONE** question from each section. The **fifth** question may be attempted from any section.

**SECTION—A**

1. Discuss key features of the Python programming language. 15
2. Write down the structure of a Python program. How is a Python program edited and run ? 10,5

**SECTION—B**

3. Write down a program to check the conditions of room allotment in a hotel. Rooms at the ground floor are in luxury category and are costlier than the rooms at first and second floors. The hotel has no lift facility. Write logic to allocate rooms to able/differently-abled visitors as per their budget preference. Print message 'Room not available' if there is no room as per visitor's requirements. 15

4. Discuss any 5 library functions in the Python language.  
Give at least 2 examples of each. 15

### SECTION—C

5. What is a dictionary ? How is it useful ? Explain any  
5 dictionary methods. 2,3,10
6. Consider first 100 natural numbers. Write a program  
to count all the double digit numbers that are odd. 15

### SECTION—D

7. (a) What is garbage collection ? How does it work  
in Python ? 10
- (b) Define a class to record information about a food  
item. 5
8. (a) Write down the SQL statements to create a table  
to store the information about a movie.
- (b) Assume the table contains 5 rows, write the  
statement to retrieve the most popular movie.
- (c) Delete the movie which is least popular.
- (d) Update the table to reflect change in movie  
collection at the end of the day. 6,3,3,3