

Exam. Code : 107203

Subject Code : 1685

Bachelor of Computer Application (BCA)

3<sup>rd</sup> Semester (Batch 2020-23)

## INTRODUCTION TO PYTHON PROGRAMMING

### Paper—III

Time Allowed—3 Hours] [Maximum Marks—75

**Note** :—Attempt **FIVE** questions in all, selecting at least **ONE** question from each section. The **fifth** question may be attempted from any section. All questions carry equal marks.

#### SECTION—A

1. (a) Discuss the technical strengths of Python. Write a simple Python program that takes input from a user. 7
- (b) Explain different data types and illustrate how strings are immutable. 8
2. (a) How the list is accessible and also explain different operators used on the list. 7.5
- (b) How to create a dictionary and explain its different operations. Elaborate how to iterate over a dictionary. 7.5

#### SECTION—B

3. (a) Explain different loops in Python. 7
- (b) Write a program to calculate the factorial of a number. 8

4. (a) Differentiate Iteration and Recursion using examples. 8
- (b) What are the different methods of importing the Python module ? 7

#### SECTION—C

5. (a) How to read and write into Python files ? Explain with the program. 8
- (b) What is Exception handling ? Write a program that handles exception raised on dividing a number by 0. 7
6. (a) How to create a constructor in Python ? Define the use of destructor program. 8
- (b) Explain the concept of overriding the methods with the program. 7

#### SECTION—D

7. (a) How is SQL Database Connection made using Python ? Illustrate how to create a table in Python ? 8
- (b) Explain SQL constraints with examples. 7
8. Explain the following commands with examples :
  - (a) Insert Command
  - (b) Delete Command
  - (c) Update Command. 15