

Exam. Code : 107203  
Subject Code: 1762

Bachelor of Computer Application (BCA) 3<sup>rd</sup> Semester  
INTRODUCTION TO PYTHON PROGRAMMING  
Paper—III

Time Allowed—3 Hours] [Maximum Marks—75

Note :— Attempt **five** questions in all by selecting at least **one** question from each Section. The **fifth** question may be attempted from **any** section.

**SECTION—A**

1. (a) Explain the process of computational problem solving using python. 8
- (b) Define Operators, expressions and data types. 7
2. (a) Write a python code to create a list of seven colors of VIBGYOR. Also perform iteration over the list. 7
- (b) Explain the usage of nested conditions by writing python program. 8

**SECTION—B**

3. (a) Write a python program to find the smallest of three numbers using if else control structure. 7.5
- (b) What are parameters and arguments ? Write a program to find second largest number from a list using functions. 7.5

(Contd.)

4. (a) What are python packages ? How packages are used for problem solving ? Explain. 7.5
- (b) Why top-down design is preferred over bottom up ? Explain. 7.5

**SECTION—C**

5. (a) Write a python program to write text into a text-file. Explain its output. 7.5
- (b) Differentiate write() and writeline() functions. 7.5
6. (a) Write a python code to find area of a circle by using features of object oriented programming. Explain the output of the code. 5
- (b) What is the real time use of class in live projects ? Explain. 7.5

**SECTION—D**

7. Write SQL query to create a database table. Insert data into the table by writing insert queries. Write the python code to access the data from table into python's shell. 15
8. Explain the following concepts by taking suitable examples :—
  - (a) Searching from table. 7.5
  - (b) Programming with multiple tables. 7.5