Exam. Code : 107203
Subject Code : 8143

Bachelor of Computer Application (BCA) 3rd Semester (Old Sylb 2018)

COMPUTATIONAL PROBLEM SOLVING USING PYTHON

Paper—III

Time Allowed—3 Hours]   [Maximum Marks—75

Note :— Attempt any **FIVE** questions. All questions carry equal marks.

1. (a) Discuss any five application areas of Python.   5

   (b) Differentiate Variables and Identifiers.   5

   (c) Discuss the use of logical operator by taking suitable example.   5

2. (a) Write a program to find smallest among three integers.   7.5

   (b) What are different steps involved in Python debugging ? Explain.   7.5

3. (a) What are different list sequences ? Explain by taking suitable example.   7.5

   (b) Write a program to find count of even and odd numbers from a list of numbers.   7.5

4. Discuss the flow of execution of a Python function. Write a program to find factorial of a number using function.   15

5. (a) Write a program to perform matrix multiplication. 7.5

(b) How Python carries out Advanced Text Parsing ? Explain. 7.5

6. Explain the following concepts :

(a) Exception Handling 5

(b) Object Orientation 5

(c) Modular Design 5

7. (a) Differentiate top-down and bottom-up approach of modular programming. 7.5

(b) What is meant by package in Python ? Explain. 7.5

8. Explain the following concepts with respect to SQLite :

(a) Connecting to a Database 5

(b) Creating a table 5

(c) Inserting a record. 5

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