(b) Explain the types of methods available in python with a suitable example of each method.   7.5

9. Explain the following :   15

(a) Write a Python program to overload + operator.

(b) How operator overloading can be implemented in Python ? Give an example.

(c) Define Inheritance & Polymorphism with the help of example.

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B. Tech. 3rd Semester (CSE)
Examination – March, 2021

PYTHON PROGRAMMING

Paper : PCC-CSE-207-G

Time : Three Hours]   *[Maximum Marks : 75*

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note : Attempt *five* questions in all, selecting *one* question from each Unit. Question No. **1** is *compulsory*. All questions carry equal marks.

1. Write a short note on :   15

(a) Arithmetic operators and expressions in python.

(b) List the rules to declare a variable in python. Demonstrate atleast three different types of variable uses with an example program.

(c) How python handles the exception ? Explain with the help of example.

(d) What are lists ?

(e) How tuples are created in python ? Explain how to access the tuple with the help of example ?

(f) What are polymorphic functions ?

UNIT – I

2. (a) Write a python program to list all the factorial numbers less than or equal to an input number n. 7.5

(b) Write a python code to check whether the given number is a strong number. Strong numbers are numbers whose factorial of digits is equal to the original number. 7.5

3. (a) Give the python code to find the minimum among the list of 10 numbers. 7.5

(b) How to create a list in python ? Illustrate the use of negative indexing of list with example. 7.5

UNIT – II

4. (a) Write the python code to display the last six characters of the string "The breakfast is ready" to the console. 5

(b) Explain string slicing in python. Show with example. 5

(c) How to read/write text and numbers from the file in Python ? 5

5. (a) Write a python program to accept the sentence from the user and display the longest word of that sentence along with its length. 7.5

(b) Write a python program that reads a text file and changes the file by capitalizing each character of file. 7.5

UNIT – III

6. Describe the following : 7.5 × 2 =15

(a) Write a python program to search a specific value from a given list of values using binary search method.

(b) Explain recursive function with the help of example.

7. (a) Explain basic list operators used in python. 7.5

(b) Explain Dictionary in Python with the help of example. How it is different from List ? 7.5

UNIT – IV

8. (a) What are the differences between abstract class and interface ? Write a python program in which Maruti and Santro sub classes implement the abstract methods of the super class Car. 7.5