

Roll No.

Total No. of Printed Pages : 4

Code No. : BC-392

Online Annual Examination, 2022

B.C.A. Part III

Paper II

PROGRAMMING IN PYTHON

Time : Three Hours]

[Maximum Marks : 80

Note : Section 'A', containing 10 very short answer type questions, is compulsory. Section 'B' consists of short answer type questions and Section 'C' consists of long answer type questions. Section 'A' has to be solved first.

Section 'A'

Answer the following very short answer type questions in one or two sentences. 1 × 10 = 10

1. Write the history of Python.
2. What is OOP ?
3. How to declare an Array in Python ?
4. What is the use of new operator ?

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5. What is Class ?
6. What is the use of protected accessibility in class ?
7. What is the use of CLASSPATH in Python ?
8. What is the use of interface ?
9. What is Multithreading ?
10. Write the full form of JDBC.

Section 'B'

Answer the following short answer type questions with word limit 150-200. 4 × 5 = 20

1. Explain the Identifiers, Keywords, Statement, Expression, and variables in Python programming language with examples.

Or

Write a Python program to check if a 3-digit number is arm strong number *or* not.

2. Write Python code to check if a given year is a leap year *or* not.

Or

Write Python code to find the factorial of a number.

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3. What is operator overloading in Python ? Explain with an example.

Or

What is the use of constructor ? Explain with an example.

4. What are Exceptions ? Explain the method to handle them with example.

Or

What is the use of inner class ? Explain with an example.

5. Explain Multithreading with an example.

Or

How to open and close file ? Also give the syntax for the same.

Section 'C'

Answer the following long answer type questions with word limit 300-350. 10 × 5 = 50

1. What is Python ? Describe its features and applications.

Or

What are the different loop control statements available in Python ? Explain with suitable examples.

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2. Describe Arithmetic Operators, Assignment operators, comparison operators, Logical operators in detail with examples.

Or

Write Python program to add two matrices and also find the transpose of the resultant matrix.

3. Demonstrate implementation of hierarchical inheritance in python, with a program.

Or

Explain with an example while loop, break statement and continue statement in python.

4. What is package in python ? Explain, how can you use package in your program with an example code ?

Or

What is Interface ? How to create interface in python ? Explain with an example.

5. Write a python program to create and read the CITY.TXT file is one read and print the contents on the output screen.

Or

What is the use of JDBC in Python ? Explain JDBC connectivity for backend database with an example.

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