

Roll No. :

Total No. of Questions : 11]

[Total No. of Printed Pages : 3

D-288

B.C.A. (Part-II) Examination, 2023

PYTHON

Paper - BCA-206 (A)

Time : 3 Hours]

[Maximum Marks : 70

Section-A

(Marks : 2 × 10 = 20)

Note :- Answer all *ten* questions (Answer limit **50** words). Each question carries **2** marks.

Section-B

(Marks : 4 × 5 = 20)

Note :- Answer all *five* questions. Each question has internal choice (Answer limit **200** words). Each question carries **4** marks.

Section-C

(Marks : 10 × 3 = 30)

Note :- Answer any *three* questions out of five (Answer limit **500** words). Each question carries **10** marks.

Section-A

1. (i) What Syntax do you use to comment out some lines in Python?
- (ii) What do you mean by ternary expression ?
- (iii) Define a dictionary in Python.
- (iv) What is the purpose of using namespace ?

BRI-253

(1)

D-288 P.T.O.

- (v) What do you mean by Lambda function ?
- (vi) Write syntax to declare a Numpy array in Python.
- (vii) What syntax do you use to show the first 10 records of a table ?
- (viii) When do you use reshape in a data frame ?
- (ix) Which library do you include in order to plot a graph in Python ?
- (x) What is the purpose of using except block in exception handling ?

Section-B

2. Write a Python program to print odd numbers lesser than 20, using range function.

Or

Explain the importance of indentation in Python.

3. Explain the concept of slicing of lists in Python.

Or

How do you return multiple values in Python ?

4. How can you generate a number between 1 and 100 randomly ?

Or

Write a program in Python to add two matrices.

5. How do you read data from a CSV file in Pandas ?

Or

How do you show the correlation between each column in a Dataframe? Explain using a suitable example.

6. Write a Python program to copy content of one file to another.

Or

Explain why 'scikit-learn' module is used in Python.

Section–C

7. Explain the usage of any *five* binary operators with suitable examples in Python.
8. Explain the concept of dict comprehension using suitable examples.
9. How do you create objects and methods in Python? Explain using suitable examples.
10. Explain the following in the context of data analysis in Python :
 - (i) dropna
 - (ii) iloc
 - (iii) apply
 - (iv) sum
 - (v) describe
11. Write a program to plot a histogram for marks obtained in your five subjects. You may make suitable assumptions for marks and subjects, as per choice.