

M.Sc. - I (Computer Science) (NEP Pattern) Semester-I
NEP-22 / 01MSCCS02 - Paper-II - Python Programming

P. Pages : 2

Time : Three Hours



GUG/S/25/15079

Max. Marks : 80

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- Notes :
1. All questions are compulsory and carry equal marks.
 2. Draw neat and labelled diagrams wherever necessary.
 3. Avoid vague answers and write specific answers related to questions.

Either:

1. a) Explain the features of python in detail. 8
- b) Describe the basic elements of python. 8

OR

- c) Write about Mutable & Immutable object with suitable example. 8
- d) Explain tuple with its operations. 8

Either:

2. a) Define function. Explain the advantages of function. 8
- b) Explain the formal parameters and actual parameters in python function with suitable example. 8

OR

- c) Demonstrate Global and Local Variable Scope in python. Give example of it. 8
- d) Write a detail note on user defined exception in python. 8

Either:

3. a) What do you mean by modules in python? Explain math module in brief. 8
- b) Describe file handling in python. 8

OR

- c) Write a note on- 8
 - i) Encapsulation
 - ii) Data Hiding
- d) Explain polymorphism with suitable example. 8

Either:

4. a) What is Array in python? Explain the types of array in brief. 8
- b) Explain Numpy module in detail. 8

OR

- c) Write a note on- 8
- i) Indexing
- ii) Slicing
- d) What do you mean by Data Visualization? Explain Matplot module in brief. 8
5. Solve all the questions.
- a) Explain string manipulation in brief. 4
- b) Write a note on python standard exception. 4
- c) Explain in short inheritance in python. 4
- d) Plot Simple Mathematical function (Sin X, X²) and explain. 4
