NEP-22 / 01MSCCS02 - Paper-II : Python Programming

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Notes : 1. All questions are compulsory and carry equal marks.
2. Draw neat and labelled diagram and use supporting data wherever necessary.
3. Avoid vague answers and write specific answer related to questions.

Either.

1. a) Explain the different features of python in detail.   **8**

b) What operators does python support? Describe the function of 'is' and 'is not' operators.   **8**

OR

c) How python operator over string? Explain string slicing in detail.   **8**

d) Define lists create a list with 5 integers, 2 floats, 3 strings.   **8**

Either.

2. a) What is a function? Narrate the types of function arguments with examples.   **8**

b) Explain following function parameter: **8**
   i) Formal parameter.
   ii) Actual parameter.

OR

c) What is exception? List some common exception types and explain when they occur.   **8**

d) How exceptions are handled using python write a sample example to illustrate exception handling.   **8**

Either.

3. a) What do you understand by file handling in python? List down the various access modes to open a file.   **8**

b) What do you use to read python file line by line? Give the sample example of readline () function.   **8**

OR

c) Explain following.   **8**
   i) Inheritance.   ii) Method overriding.

	d)	What is the role of object in python? Write a sample example to demonstrate it.	**8**
		Either.	
4.	a)	Explain the concept of array in python. Also explain about NumPy in detail.	**8**
	b)	What is indexing in NumPy? Explain Boolean indexing with sample example.	**8**

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OR

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	c)	What is data visualization and why it is important? Explain pyplot() and plot() in detail.	**8**
	d)	Explain with example how to create heatmap and scatter plot.	**8**
5.		Attempt all questions.	
	a)	Write note on import function.	**4**
	b)	Write short note on Recursion.	**4**
	c)	Discuss in short about operator overloading.	**4**
	d)	Explain in short about shape manipulation.	**4**

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