Day : Friday   Time : 10:00 AM-01:00 PM

Date : 5/8/2022   **S-24092-2022**   Max. Marks : 60

N.B.
1) All questions are **COMPULSORY**.
2) Figures to the **RIGHT** indicate **FULL** marks.
3) Assume suitable data **WHEREVER** necessary.
4) Draw neat diagram **WHEREVER** necessary.

Q.1 Differentiate between the datatypes, list tuple and dictionaries, also explain the **(10)** concepts of list comprehensions.

OR

Q.1 Explain Python and explain the different types of data types in Python each with **(10)** an example.

Q.2 Write a short note on Python File Handling also explain the concept of Python **(10)** Modules and Functions.

OR

Q.2 Write a Python Program to click if a number is +ve, –ve or zero. Also draw the **(10)** flow chart for above program.

Q.3 Explain different types of Exception and differentiate between checked **(10)** exceptions, unchecked exception.

OR

Q.3 What is meant by Exception? Explain different types of Exception with their **(10)** Hierarchy Diagram.

Q.4 Define OOP and explain in detail object oriented program with example. **(10)**

OR

Q.4 Write a Python program to demonstrate multiple inheritance with flowchart. **(10)**

Q.5 Define Networking in threads also write a short note on i) Kernel Threads and ii) **(10)** User space.

OR

Q.5 What are the different types of threads in python? Explain the difference between **(10)** i) Kernel Threads and ii) User Space with its advantages and disadvantages.

Q.6 Explain the concept of NumPy in testing, Debugging and Sharing data using **(10)** sockets.

OR

Q.6 Describe arrays and array manipulation with example. **(10)**

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