P131/ICT152/EE/20230606

Time : 3 Hours   **Marks : 80**

Instructions :

1. All Questions are Compulsory.

2. Each Sub-question carry 5 marks.

3. Each Sub-question should be answered between 75 to 100 words. Write every questions answer on separate page.

4. Question paper of 80 Marks, it will be converted in to your programme structure marks.

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1. Solve any **four** sub-questions.

   a) Explain in detail various types of operators in python.   5

   b) Explain in the usage of try and except in python programming.   5

   c) What is a list? How can we loop through a list?   5

   d) Write a Python program to perform linear search.   5

   e) Explain string functions and methods in detail.   5

2. Solve any **four** sub-questions.

   a) Write note on Fruitful functions and void functions.   5

   b) Write a Python program to sum an array of numbers.   5

   c) Explain the following with examples: 5

       i) Python operators

       ii) Python loops

   d) How does Python handle various data types and their conversions?   5

   e) What a range() function does? Give an example.   5

3. Solve any **four** sub-questions.

   a) How can you say that a tuple is an ordered list of objects?   5

   b) Discuss the utility and significance of Dictionaries.   5

   c) What is RegEx? What are the functions and meta characters used?   5

   d) What is array slicing? How can it be used to access one-dimensional and multidimensional sub arrays?   5

   e) Compare and contrast lists and tuples.   5

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4. Solve any **four** sub-questions.

    a) How to work on Data files in Python?   5

    b) How to use Python widgets? Explain functionality of any one widget.   5

    c) Write note on Data Visualization.   5

    d) How to fetch data SQLite database in Python?   5

    e) Explain how classes and objects are created in Python with example.   5