**Code No. ES304EC**

**METHODIST COLLEGE OF ENGINEERING & TECHNOLOGY (An Autonomous Institution)**

**B.E. (ECE) III-Semester (AICTE) (Regular) Examination, Feb -2023**

**Subject: PYTHON PROGRAMMING**

**Time: 3 hours Max.Marks:60**

**Note: Missing data, if any, maybe suitably assumed.**

**PART-A**

**Answer All the questions.**

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| **Q.No.** | **Questions** | **Marks** |  |  |
| 1. a | List the applications of python. | 2 |  |  |
| b | Write python code to accept string input and display the same. | 2 |  |  |
| c | What is the output of Following statements:  >>> 5 == 5  >>> 5 == 6 | 2 |  |  |
| d | What do mean by break and continue statements in python. | 2 |  |  |
| e | Write the output of code snippet:  x = 10  print("x is of type:",type(x))  y = 10.6  print("y is of type:",type(y))  z = x + y  print(z)  print("z is of type:",type(z)) | 2 |  |  |
| f | What is the difference between list and tuples in Python? | 2 |  |  |
| g | Write a user defined function to add two numbers. | 2 |  |  |
| h | Write a short notes on python local variables with example. | 2 |  |  |
| i | List out various types of reports. | 2 |  |  |
| j | What are the error messages that are displayed for the following exceptions?  a. Accessing a non-existent list item  b. Accessing a key that isn’t in the dictionary  c. Trying to open a non-existent file | 2 |  |  |

**PTO**

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**PART-B**

**Answer Any Five questions**.

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| **Q.No.** |  | **Questions** | **Marks** |  |  |
| **2.** | **a** | What is Algorithm and need of algorithms . Design an algorithm to add two numbers and display the result. | **4** |  |  |
| **b** | Explain in detail Key features of Python? | **4** |  |  |
| **3.** | **a** | Explain about the chained conditional and Nested conditionals in Python with examples. | **4** |  |  |
| **b** | Discuss about the order of operator Precedence in Python. | **4** |  |  |
| **4.** | **a** | Write python code for the following string handling methods:  Compare strings, Concatenate ,length , Membership. | **4** |  |  |
| **b** | **What is type conversion in Python?** | **4** |  |  |
| **5.** | **a** | Explain Lambda with example ? Differentiate between lambda and normal function call. | **4** |  |  |
| **b** | Write Python Program to Display Fibonacci Sequence Using Recursion. | **4** |  |  |
| **6.** | **a** | Write Python Program to Find the Longest Word in a File. | **4** |  |  |
| **b** | Describe the catching exceptions using try and except statements | **4** |  |  |
| **7.** | **a** | Draw the flowchart To find whether a number is prime or not | **4** |  |  |
| **b** | Write Python code to check if a given year is a leap year or not. | **4** |  |  |
| **8.** | **a** | Discuss the relation between tuples and lists, tuples and dictionaries in detail | **4** |  |  |
| **b** | Explain about the import statement in modules | **4** |  |  |
| **9.** | **a** | Discuss the following methods of os.path module.  a) **os.path.basename(path)**  b) **os.path.dirname(path)**  c) **os.path.isfile(path)**  d) **os.path.isdir(path)** | **4** |  |  |
| **b** | Write Python code to multiply two matrices using nested For loop. | **4** |  |  |

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