**Code No. ES304EC**

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

**B.E. (ECE) III-Semester (AICTE) (Supplementary) Examination, AUG -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** | Write python code to print the below output:  31-12-2022 | **2** |  |  |
| **b** | Sketch a flow chart for the following code:  # start  num = input("Enter a number: ")  num = float(num)  num\_plus\_2 = num + 2  print(num\_plus\_2)  # end | **2** |  |  |
| **c** | What is the output of Following statements:  a = 1 b = 1 while (a<10):  print ('Iteration',a)  a = a + 1  b = b + 1  if (b == 4): break  print ('While loop terminated') | **2** |  |  |
| **d** | What is the output of Following statements:  >>> 2 \*\* 3 \*\* 2  >>> (2 \*\* 3) \*\* 2 | **2** |  |  |
| **e** | **What are the common core data types in Python?** | **2** |  |  |
| **f** | What is the output of code snippet:  thisdict = {  "brand": "Ford",  "model": "Mustang",  "year": 1964,  "year": 2020  }  print(thisdict) | **2** |  |  |
| **g** | What is meant by module in python? List python modules. | **2** |  |  |
| **h** | Write a short notes on python global variables with an example. | **2** |  |  |
| **i** | What are the methods to rename and delete files. | **2** |  |  |
| **j** | Write a python program to writes “Hello world” into a file. | **2** |  |  |

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**PART-B**

**Answer Any Five questions**.

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| **Q.No.** |  | **Questions** | **Marks** |  |  |
| **2.** | **a** | Discuss how memory management is done in python. What are the different types of comments in python? | **4** |  |  |
| **b** | Sketch a flow chart for the following code and discuss about its notations.  # start  num = input("Enter a number: ")  num = float(num)  if num>0:  print("Greater than 0")  # end | **4** |  |  |
| **3.** | **a** | Discuss about Python Arithmetic and Logical operators with examples. | **4** |  |  |
| **b** | Write a Python program to find largest of three numbers by accepting input from user. | **4** |  |  |
| **4.** | **a** | What is a tuple. Write a Python program to demonstrate the addition of elements of string and integer data type in a tuple and print the same. | **4** |  |  |
| **b** | Write a note on Dictionary and write python code to create a dictionary of four items and use the functions len, in ,values. | **4** |  |  |
| **5.** | **a** | Explain about modules in python.Write a python program to demonstrate the module. | **4** |  |  |
| **b** | Write a Python program using functions to find the value of nPr and nCr without using inbuilt factorial() function. | **4** |  |  |
| **6.** | **a** | What is a text file? Give an example for a text file. Explain how the read and write method works on a file. | **4** |  |  |
| **b** | What is an exception? Explain with few examples. | **4** |  |  |
| **7.** | **a** | What is pseudo code? Explain its guidelines and benefits. | **4** |  |  |
| **b** | Write a program to check whether a number is prime or not. Prompt the user for input. | **4** |  |  |
| **8.** | **a** | Write Python code to determine whether the given string is a Palindrome. | **4** |  |  |
| **b** | Find the area and perimeter of a circle using functions. Prompt the user for input. | **4** |  |  |
| **9.** | **a** | Explain with examples different modes of opening files. | **4** |  |  |
| **b** | Explain about string slicing and string comparison with examples | **4** |  |  |

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