

Code No.: CS7240E

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**CMR ENGINEERING COLLEGE: : HYDERABAD**  
**UGC AUTONOMOUS**  
**IV-B.TECH-I-Semester End Examinations (Supply) – April - 2024**  
**PYTHON PROGRAMMING**  
**(ECE)**

[Time: 3 Hours]

[Max. Marks: 70]

**Note:** This question paper contains two parts A and B.

Part A is compulsory which carries 20 marks. Answer all questions in Part A.

Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

**PART-A**

**(20 Marks)**

1. a) What are tuples in Python? [2M]
- b) What is meant by key-value pairs in a dictionary? [2M]
- c) How to access the values in strings give an example. [2M]
- d) What is an exception? Explain with few examples. [2M]
- e) Why does Python need a global interpreter lock? [2M]
- f) Define thread with an example. [2M]
- g) Give a brief description of several Built-in attributes related to File object. [2M]
- h) How to create Label widget in Python? [2M]
- i) What is the basic database for Python? Give its usage. [2M]
- j) How to query database using Python? [2M]

**PART-B**

**(50 Marks)**

2. Explain the following file built-in functions and method with clear syntax, description and illustration. [10M]  
i) open( ) ii) file( ) iii) seek( ) iv) tell( ) v) read( )
- OR**
- 3.a) List and explain few most commonly used built-in types in python. [5M]
  - b) How to declare and call functions in Python programs? Illustrate with an example script. [5M]
  4. Write a python program to open a file and check what are the access permissions acquired by that file using os module? [10M]
- OR**
- 5.a) Define file and explain the two categories of files? [5M]
  - b) How to import a module from a package show with an example? [5M]
  - 6.a) What is the motivation behind parallelism and state how python achieves parallelism? [5M]
  - b) Explain briefly about thread and threading module objects in Python. [5M]
- OR**
7. What is Global interpreter Lock? Discuss its uses in program. [10M]
  8. Write a Python GUI program to create Listbox bar widgets using tkinter module. [10M]
- OR**
9. Explain the syntax and parameters of the following Widgets using tkinter in Python with appropriate code snippets. [10M]  
i) Scrollable List Box ii) Menu iii) Progress bar
  10. Write a Python program to access the bill details of a customer by accepting customer ID from user. Database table will have customer bill details along with customer ID. [10M]
- OR**
11. Draw and explain the architecture of DB-API interface for SQLite Database. [10M]

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