CMR ENGINEERING COLLEGE: : HYDERABAD
UGC AUTONOMOUS
II–B.TECH–II–Semester End Examinations (Supply) - February- 2024
PYTHON PROGRAMMING
(Common to CSE, IT)

[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) Define the scope and life time of a variable in python.   [2M]
   b) Write the difference between operator and operand and list don String special [2M]
      operators.
   c) Write a python code to write a file by opening it in W mode.   [2M]
   d) How to handle multiple exceptions with single except clause?   [2M]
   e) Write the difference between process and thread.   [2M]
   f) Write various functions of Math module.   [2M]
   g) List out standard decision attributes of Tkinter module.   [2M]
   h) How to create label widget in python?   [2M]
   i) Discuss SQL commands/Statements used for creating, using and dropping a Database. [2M]
   j) Write about declarative mapping.   [2M]

PART-B   (50 Marks)

2. Summarize various operators, built-in functions and standard library modules that [10M]
   deal with Python's numeric data type.

OR

3. a) Write about various numeric data types in python with examples.   [5M]
   b) Write a python program to count number of vowels in the given string.   [5M]

4. Explain the following file built-in functions with clear syntax description.   [10M]
   i) open()   ii) file()   iii) seek()   iv) tell()   v) read()

OR

5. How to create user defined exceptions? Explain with example program.   [10M]

6. a) What is the motivation behind parallelism and state how python achieves parallelism. [5M]
   b) Explain Briefly about thread and treading module objects in python.   [5M]

OR

7. a) What is multithreading? Discuss how to start a new thread.   [5M]
   b) what is mean by regular expression? How to find whether an email id entered by the [5M]
      user is valid or not using Python re module.

8. Consider a Python GUI program that produces a window with following widgets   [10M]
   using Python code.
   i. A button to retrieve the next value in that list (if there is one) this button is displayed
   if there is no next value in the list.
   ii. A label to display the number of items being displayed and total number of items.

OR

9. Develop a basic web browser using Tkinter which should have a text widget where   [10M]
   the user can enter a URL and a Canvas to display the contents of the page.

10. Write a source code in Python to read single and multiple results of query execution [10M] using DB-API.

OR

11.a) Explain how database commands and queries are given to a data base by using mysql. [4M]

b) Write a python program to create product table (pro-id, pro-name, quantity) using [6M] ORM.

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