

CMR ENGINEERING COLLEGE: : HYDERABAD
UGC AUTONOMOUS

II-B.TECH-II-Semester End Examinations (Supply) - December- 2025
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) List the advantages of Tuple over List. [2M]
- b) What are logical operators and Bitwise operators? [2M]
- c) How to open a new file in Python? Give an example. [2M]
- d) What is a text file? Give an example for a text file. [2M]
- e) Why does Python need a global interpreter lock? [2M]
- f) Define thread Give an example. [2M]
- g) Define CGI and its applications. [2M]
- h) What is the purpose of Tkinter 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. What is a list in Python? How to create nested lists? Demonstrate how to create and print a 3-dimensional matrix with lists. [10M]

OR

- 3.a) Give a comparison between lists, tuples, dictionaries and sets. [5M]
- b) List and explain various Data types in Python programming. [5M]
4. What is the difference between else block and finally block in exception handling? Explain with an example program. [10M]

OR

5. Is it possible to implement multiple exception blocks in Python exception handling? Justify your answer. [10M]
6. What are regular expressions? How to find whether an email id entered by user is valid or not using Python 're' module. [10M]

OR

7. Explain multi threaded programming in python with an example. [10M]
8. Write a Python GUI program to create Listbox bar widgets using tkinter module. [10M]

OR

9. Write a Python program that creates a GUI with a textbox, Ok button and Quit button. On clicking Ok, the text entered in textbox is to be printed in Python shell; on clicking Quit, the program should terminate. [10M]

10. Explain the usage of connection and cursor objects used in DB-API. [10M]

OR

11. Explain the benefits of python for database programming with suitable example. [10M]
