

**CMR ENGINEERING COLLEGE: : HYDERABAD**  
**UGC AUTONOMOUS**

**II-B. TECH-II-Semester End Examinations (Supply) -December- 2025**  
**PYTHON PROGRAMMING**  
**(Common for CSE, IT)**

**[Time: 3 Hours]**

**[Max. Marks: 60]**

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

Part A is compulsory which carries 10 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**

**(10 Marks)**

1. a) List most commonly used built-in types in python. [1M]
- b) Define membership operator and identity operators in python. [1M]
- c) Write about namespaces and related modules in file. [1M]
- d) Differentiate between importing and loading of a module. [1M]
- e) Write the advantages and disadvantages of multi-threading. [1M]
- f) What is GIL in python? [1M]
- g) List various widgets used in GUI. [1M]
- h) What is the need of Tkinter module in python? [1M]
- i) What is DB-API? [1M]
- j) Define ORM. [1M]

**PART-B**

**(50 Marks)**

2. Explain operators in python with appropriate examples and write a python program to find factorial of a number using both iteration and recursion. [10M]

**OR**

3. Discuss about python modules with examples. [10M]
4. Explain in brief about python packages. [10M]

**OR**

5. Explain in detail about file attributes, file built-in methods and persistent storage modes. [10M]
6. Explain briefly about thread and threading module objects in Python and also discuss about Related modules of multi-threading. [10M]

**OR**

7. Demonstrate different types of Locks with examples in multi-Threading. [10M]
8. What is the need of Tkinter module in python and also discuss about Tkinter module with examples (labels, check box, buttons etc). [10M]

**OR**

9. Give an overview and demonstration of building web applications using python's CGI. [10M]
10. Discuss about database programming in python? And explain the procedure of Database Programming using any DB-API with example. [10M]

**OR**

11. Write a python program to insert data into Product Table (pro\_id, pro\_name, quantity) using ORM(SQL Alchemy). [10M]

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