

CMR ENGINEERING COLLEGE: : HYDERABAD**UGC AUTONOMOUS****II-B.TECH-II-Semester End Examinations (Supply) -June- 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 standard data types in python. [2M]
- b) What are the rules used for declaring an identifier? [2M]
- c) List some few common Exception types. [2M]
- d) What is module and package in Python? [2M]
- e) Give the features of match and search regular expression function. [2M]
- f) What are the stages of thread in Python? [2M]
- g) What is the function of GUI in Python? [2M]
- h) List the two methods used in CGI programming. [2M]
- i) What is API and REST API in Python? [2M]
- j) Write the purpose of Django ORM. [2M]

PART-B**(50 Marks)**

- 2.a) List out various operators available in Python and explain their precedence and associativity. [5M]
- b) Write a python program to calculate the total amount to be paid by user after reducing the 10% discount on purchases more than 1000 rupees. [5M]

OR

- 3.a) What Is a Function Routine? Write a Python function that prints all factors of a given number. [6M]
- b) Write a python script to perform swapping of two numbers without using third variable. [4M]

- 4.a) How to create, raise and handle user defined exceptions in Python. [6M]
- b) Briefly explain various operations on text files. [4M]

OR

5. Write a python program to illustrate the cases where a try block throws multiple exceptions. [10M]
6. Write a Python program that creates two a demon threads and two non-daemon threads. Main thread should wait for all other threads to finish. [10M]

OR

- 7.a) Differentiate threads and process used in python. [5M]
- b) Explain briefly about special symbols and characters used in regular expression. [5M]

8. Explain the syntax and parameters of the following Widgets using tkinter in Python [10M]
with appropriate code snippets.
i) Scrollable List Box.
ii) Menu.
iii) Progress bar.

OR

9. Compare the GUI-based programs with Terminal-based programs. [10M]
10. Draw and explain the architecture of DB-API interface for SQLite Database [10M]

OR

11. Write a python script for the following [10M]
i) Create a table.
ii) Insert a command.
iii) Reading the data.
iv) Update the records.
