

CMR ENGINEERING COLLEGE: : HYDERABAD
UGC AUTONOMOUS

II–B.TECH–II–Semester End Examinations (Regular) -July- 2024

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) How do you convert a list to a tuple in Python? [1M]
- b) List any four standard types in Python. [1M]
- c) How does Python use modules? [1M]
- d) What is the purpose of the open() function in Python? [1M]
- e) What is the purpose of the ^ symbol in Python regular expressions. [1M]
- f) Name a method from the Python threading module used to synchronize threads. [1M]
- g) What is the purpose of CGI in web development? [1M]
- h) Which module used in Python for creating graphical user interfaces (GUIs)? [1M]
- i) What is the primary purpose of database programming? [1M]
- j) Which module can be used to interact with MySQL databases? [1M]

PART-B

(50 Marks)

2. Discuss the operators in python with suitable examples. [10M]

OR

3. Explain the concept of sequences in Python, focusing on strings, lists, and tuples. [10M]

4. Discuss the various built-in attributes and methods associated with file objects in Python. [10M]

OR

5. Explain how import statements work and how conflicts in namespaces can be resolved. [10M]

6. Discuss the advantages of multithreading in python application with example. [10M]

OR

7. Explain the role and impact of the Global Interpreter Lock (GIL) on Python's multithreading capabilities. [10M]

8. Discuss the basic elements of GUI programming in Python using Tkinter. [10M]

OR

9. Describe the process of creating a simple web client in Python that interacts with APIs. [10M]

10. Explain the structure and core functionalities of the Python DB-API. [10M]

OR

11. Discuss the concept of Object Relational Mapping (ORM) in Python. [10M]
