Code No.: CS513PE   R20   H.T.No. ☐ ☐ 8 R ☐ ☐ ☐ ☐ ☐

CMR ENGINEERING COLLEGE: : HYDERABAD
UGC AUTONOMOUS
III–B.TECH–I–Semester End Examinations (Regular) - January- 2024
PRINCIPLES OF PROGRAMMING LANGUAGES
(CSE)

[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.

PART-A   (20 Marks)

1. a) Tell the reasons for studying concepts of programming languages.   [2M]
 b) Compare the formal methods of describing syntax.   [2M]
 c) Define scope and lifetime.   [2M]
 d) Test for relational expressions.   [2M]
 e) Define nested subprogram.   [2M]
 f) Utilize the concept of data abstraction.   [2M]
 g) Why Object-oriented programming is used?   [2M]
 h) Define monitors.   [2M]
 i) List applications of functional programming languages.   [2M]
 j) Make use of Scripting languages.   [2M]

PART-B   (50 Marks)
2. Make use of different language evaluation criteria with examples.   [10M]
       OR
3. Discover programming environments and evaluation of programming languages.   [10M]

4. Conclude type checking and strong typing with required examples.   [10M]
       OR
5. Assess unconditional branching and Guarded commands.   [10M]

6. Propose design issues for subprograms in principles of programming languages. [10M]
       OR
7. Summarize language examples and encapsulation constructs.   [10M]

8. Discuss subprogram level concurrency and Ada support for concurrency.   [10M]
       OR
9. Demonstrate event handling. Explain event handling with Java and C# in detail. [10M]

10. Distinguish functional and imperative languages with suitable examples.   [10M]
       OR
11. Explain Python variables, Storage and control.   [10M]

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