

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

**III-B.TECH-I-Semester End Examinations (Supply) - December- 2024
PRINCIPLE 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) Define Syntax and Semantics. | [2M] |
| b) Write the uses of parse trees. | [2M] |
| c) Define associative arrays. | [2M] |
| d) Distinguish named type and structure type compatibility. | [2M] |
| e) Define scope and lifetime of a variable. | [2M] |
| f) What is mean by pass by value? | [2M] |
| g) Define data abstraction. | [2M] |
| h) Write an example of an exception in Java. | [2M] |
| i) List data types of Python language. | [2M] |
| j) Write few examples of scripting languages. | [2M] |

PART-B

(50 Marks)

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|---|-------|
| 2. Discuss various programming domains and their associated languages. | [10M] |
| OR | |
| 3. Explain with an example how operator associatively can be incorporated in grammars. What are the uses of an attribute grammar? | [10M] |
| 4. Define the followings | [10M] |
| • Stack Dynamic | |
| • Explicit Heap Dynamic | |
| • Implicit Heap Dynamic | |
| OR | |
| 5. Differentiate between static and dynamic type checking and give their relative advantages. | [10M] |
| 6. Define abstract data type. Explain type checking technique in parameter passing. | [10M] |
| OR | |
| 7. Write a detailed note on local referencing environments. | [10M] |
| 8. What are the various methods of exception handling? Discuss. | [10M] |
| OR | |
| 9. What are three possible levels of concurrency in programs? Explain. | [10M] |
| 10. Give the meaning of a scripting language and List few examples of scripting languages. | [10M] |
| OR | |
| 11. Explain the characteristics of scripting languages. | [10M] |
