BT-3/D-21   **43205**

PRINCIPLES OF PROGRAMMING LANGUAGES
Paper–PC-CS-CYS - 209A

Time : Three Hours]   [Maximum Marks : 75

Note : Attempt *five* questions picking at least *one* question from each unit.

UNIT–I

1. (a) Explain lexical and syntactical rules for describing syntax. (9)

    (b) What is assignment? What is initialization? Explain declarations. (6)'

2. (a) Differentiate between compiler and interpreter. (6)

    (b) What is type? What is type checking? Explain static and dynamic type checking. (9)

UNIT–II

3. (a) Discuss the concept of vectors, and arrays — accessing and indexing. (8)

    (b) Explain different capabilities of file handling. (7)

4. (a) Explain the concept of abstraction, encapsulation, inheritance, and information hiding. (8)

    (b) Describe variable size data structures with examples. (7)

UNIT–III

5. (a) What are exceptions? What are exception handlers? How do they work? (8)

(b) What is concurrency? Compare sequence control and subprogram level concurrency. (7)

6. (a) Explain the concept of synchronization and mechanisms of doing it. (8)

(b) Describe the concept of static and dynamic scope. What is local data and local referencing? (7)

UNIT–IV

7. (a) What is heap based storage management? (7)

(b) What are the OOP features of C++ programming language? (8)

8. (a) What is storage management? Differentiate between programmer and system controlled storage management? (8)

(b) What are the features of functional and of logic programming languages? (7)

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