

Roll No.

Total No. of Pages : 2

BT-4/M11

8402

Programming Languages

Paper—CSE-204E

Time : Three Hours]

[Maximum Marks : 100

Note :—Attempt **FIVE** questions picking at least **ONE** question from each unit. All questions carry equal marks.

UNIT—I

1. (a) Why programming languages are different from natural languages ?
(b) What is type ? What is type checking ? Explain static and dynamic type checking.
(c) What are formal methods to represent program syntax ?
2. (a) Differentiate between compiler and interpreter.
(b) Can pointer point to multiple types of objects ? What are the challenges ?

UNIT—II

3. (a) Do we need declarations ? Explain importance of declaration.
(b) What are generic and overloaded subprograms ?
4. (a) Explain concept of abstraction, encapsulation, inheritance and classes.
(b) Describe variable size data structures with examples.

UNIT—III

5. (a) What are exceptions ? What are exception handlers ? How do they work ?
(b) Explain call by name, call by reference, call by value, and call by result.

6. (a) What is concurrency at subprogram level ? How to do it ?
(b) What is scope ? What are its types ? Explain.

UNIT—IV

7. (a) Differentiate between static and stack based storage management.
(b) What are logic programming languages ? How are they useful ? Explain.
8. (a) What are phases in storage management ? What are the problems with garbage/dangling references ?
(b) What are non-procedural languages ? How are they different ? Why are they there at first place ?