

Roll No. ....

Total Pages : 2

**8402**

**BT-4/M-12**

## **PROGRAMMING LANGUAGES**

**Paper—CSE-204-E**

Time Allowed : 3 Hours] [Maximum Marks : 100

**Note :** Attempt **five** questions in all, selecting at least **one** question from each Unit. All parts carry equal marks.

### **UNIT-I**

1. (a) Explain lexical and syntactical rules for describing syntax.  
(b) What is type conversion ? Explain.  
(c) What are enumerated and union data types ?
2. (a) What are decimal data types ?  
(b) Give example of a parse tree. What is a parse tree ?  
Show example.

### **UNIT-II**

3. (a) Explain the concept of vectors and arrays—accessing and indexing.

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- (b) What is an abstract data type ? Give ADT supportable operations.
- 4. (a) Explain different capabilities of file handling.
- (b) Describe overloaded and generic subprograms.

### UNIT-III

- 5. (a) What are exceptions ? What are exception handlers ? How do they work ?
- (b) Explain the working of recursive subprograms.
- 6. (a) What is referencing environment ? What is explicit common environment ?
- (b) What are semaphores ? How are they useful ? Explain.

### UNIT-IV

- 7. (a) What is heap based storage management ?
- (b) What are the different types of logic programming languages ?
- 8. (a) What are run time requirements of storage management ?
- (b) Compare C with C++ programming language.