

Roll No. ....

24176

**B. Tech 4th Semester (Computer Science & Engg.) Examination – May, 2013**

**PROGRAMMING LANGUAGE**

**Paper : CSE-204-F**

**Time : Three hours ]**

**[ Maximum Marks : 100**

*Before answering the question, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.*

**Note:** Attempt five questions in all. Question No. 1 is compulsory. Attempt any one question from each the four Sections.

1. (a) What is early binding ? 2
- (b) Define Dynamic Scope. 2
- (c) Define Boolean data type and Real data type. 2
- (d) What are Memory leaks ? 2
- (e) What do you mean by predefined referencing environment ? 2

- (f) What do you mean by language syntax ? 2
- (g) What is Coroutines ? 2
- (h) What do you mean by garbage data ? 2
- (i) What do you mean by programmer controlled storage ? 2
- (j) Define the concept of abstraction. 2

### SECTION – A

- 2. (a) Explain the various characteristics of Good Language. 10
- (b) Explain the various classes of Translators. 10
- 3. (a) Write a short note on Elementary Data Type . 5
- (b) Write a short note on Pre-defined Data Type. 5
- (c) Explain the following :
  - (i) Translation time binding.
  - (ii) Execution time binding. 10

### SECTION – B

4. (a) Explain Dangling references problem in storage management. 10
- (b) Explain various operations on data structures. 10
5. (a) What is Encapsulation ? Explain it with the suitable example. 10
- (b) What is abstraction and how it is different from the data hiding ? Give an example. 10

### SECTION – C

6. (a) Write a short note on Dynamic Scope . 5
- (b) Explain Call by reference method with example. 5
- (c) Explain Recursive Subprograms with an example. 5
- (d) Explain Sequencing with Non-arithmetic Expressions. 5
7. (a) Write a short note on Exceptions and Exceptions handlers. 5
- (b) Write a short note on Sequence control between statements. 5

- (c) Describe variables and constants. 5
- (d) Explain Local Referencing Environments. 5

#### SECTION – D

- 8. (a) Explain the programmer Controlled and System Controlled storage. 10
- (b) Explain static storage management and heap based storage management. 10
- 9. Explain the major program elements requiring storage during execution. 20