B.Tech. 4th Semester (CSE) Examination, May–2016

PROGRAMMING LANGUAGE

Paper–CSE-204-F

Time allowed : 3 hours] _[Maximum marks : 100_

Note : **Question No. 1 is compulsory.** _Attempt_ **five** _questions in total at least_ **one** _question from each section. Each question carries equal marks._

1. (a) Explain difference between compiled and Interpreted language. 10×2

   (b) Define a record type.

   (c) What are memory leaks.

   (d) What do you mean by predefined referencing environment ?

   (e) What do you understand by garbage collection ?

   (f) Define the concept of abstraction.

   (g) What does a linker do ?

   (h) In what ways are co-routine different from subprograms ?

   (i) Give three fundamental features of object oriented programming.

   (j) Name various parameter transmission schemes.

Section–A

2. (a) Define programming language. Explain the syntax and semantics rules of programming language. 10

   (b) Write short note on numeric data types. 6

   (c) Explain enumeration in detail. 4

(3)

Section–D

8. Explain the features of :

   (a)   Procedural language

   (b)   Non Procedural language

   (c)   Structured language

   (d)   Functional language.   20

9. (a)   Explain Dangling reference in storage management.   10

   (b)   Explain major program element requiring storage during execution.   10

(2)

3. (a)   Explain various characteristics of good programming language.   10

   (b)   Explain various classes of translation.   10

Section–B

4. (a)   Explain vectors and its implementation.   10

   (b)   What is abstraction and how it is different from data hiding ? Give an example.   10

5. (a)   Define array and its implementation in programming language.   10

   (b)   Explain various operations and data structures.   10

Section–C

6. (a)   Differentiate between static and dynamic scope with examples.   10

   (b)   Discuss various parameter transmission schemes with example.   10

7. (a)   Explain sequence control with expressions and examples.   10

   (b)   What do you mean by simple call return subprograms and recursive subprograms ?   10