Model Question Paper

Seventh Semester B Tech Degree Examination

2013 Scheme

13.702 PRINCIPLES OF PROGRAMMING LANGUAGES (F)

Part A

Answer all questions (5x4=20 marks)

1. Name eight major categories of control flow mechanisms.
2. Define dope vector and explain its purpose.
3. Explain various list operations in different languages.
4. List out the characteristics of functional programming languages.
5. What is a semaphore? How do binary and general semaphores differ?

Part B

Answer one full question out of the two from each module.

MODULE -1

6(a)Explain the various storage allocation mechanisms. (10 mark)
(b)Differentiate between enumeration-controlled loop and logically controlled loop? (10 mark)

OR

7(a).Explain scope rules with example. (10 mark)
(b) Write a note on
(i)Short circuit evaluation(5 mark)
(ii)Binding of referencing environment (5 mark)

MODULE-2

8 (a) Explain the elaboration time allocation of arrays in Ada. (5 mark)

(b) Write a note on dangling reference. (5 mark)

(c) Explain exception handling in detail. (10 mark)

OR

9(a) Summarize the difference among mark-and sweep, stop-and- copy, and generational garbage collection. (10 mark)

(b) What is a cactus stack? What is its purpose? (6 mark)

(c) Briefly explain the parameter passing modes. (4 mark)

MODULE-3

10(a). Explain the difference between dynamic and static method of binding with example. (10 mark)

(b)Write a note on

(i)Streams and monads(5 mark)

(ii) Logic programming concepts(5 mark)

OR

11(a). Explain higher order functions with example.(10 mark)

(b) Briefly explain the object oriented programming concepts.(10 mark)

MODULE-4

12(a) Explain two-level implementation of threads? (10 marks)

(b)What is the difference between greedy and minimal match? (4 mark)

(c)What is the scope of undeclared variable in scripting language? Explain with example. (6 mark)

OR

13(a). Explain non-blocking algorithms in synchronization. (10 mark)

(b) Explain data types in scripting language.(5 mark)

(c) Explain string and pattern matching in scripting language.(5 mark)