No. of Printed Pages : 3

BICS-015

01312

B.Tech. IN COMPUTER SCIENCE AND ENGINEERING (BTCSVI)

Term-End Examination

December, 2011

BICS-015 : PRINCIPLES OF PROGRAMMING LANG.

Time : 3 hours *Maximum Marks : 70*

Note : *All questions are to be answered in English Language only. Attempt* ***any seven*** *questions.*

1. (a) Distinguish between functional Programming and Logic Programming. 5

   (b) What is meant by syntax 2 symentics of a programming language ? Explain their importance in programming. 5

2. (a) Define a loop ? How do you handle special cases in loop ? 5

   (b) What are the pre conditions, invariants and post conditions ? Give their role in loop. 5

3. (a) Explain the concept of multiple inheritance with the help of a suitable C++ code. 5

   (b) Differentiate between public, private and protected member of a class with the help of suitable example. 5

4. (a) What are the difference between default and parameterized constructors ? 5

(b) Explain the concept of public and private Inheritance in C++. 5

5. (a) Discuss the different type of data types in COBOL. 5

(b) What are the methods of Parameter passing ? 5

6. (a) What is backtracking in PROLOG ? Explain with the help of a suitable example. 5

(b) Consider the following sentences : 5
"Marcus was a man. Marcus was Pompeian. All pompeians were romans. Ceaser was a Ruler. All romans hated all rulers. Marcus tried to assassinate Ceaser". Write a PROLOG program to prove that Marcus hate Ceaser and show it will be proved by your program.

7. (a) Write a LISP program for a list of vehicles and determine whether Motor - cycle occurs in vehicles. 5

(b) Explain the concept of control mechanism in PROLOG. Explain with the help of a suitable example. 5

8. (a) Explain what are different divisions and sections used in COBOL. 5

(b) Explain specification and verification of Logic Programs. 5

9. How table handling is being done in COBOL ? Also explain file processing mechanism of COBOL. 10

10. Write short note on ***any two*** : 5+5

(a) Early and Late Binding

(b) Data types in Ada language

(c) Data abstraction