

D 23470

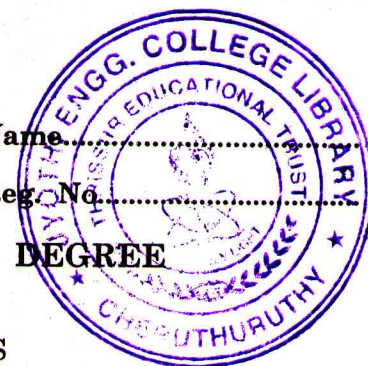
Name.....

Reg. No.....

**FIFTH SEMESTER B.TECH. (ENGINEERING) DEGREE  
EXAMINATION, DECEMBER 2011**

**CS 04 505—PROGRAMMING PARADIGMS**

(2004 admissions)



Time : Three Hours

Maximum : 100 Marks

*Answer all questions.*

**Part A**

1. (a) In short explain how language is implemented on a machine ?
- (b) Explain the need for procedures in C.
- (c) List the applications of OOP.
- (d) Explain about the different types of modules in C++.
- (e) How functional declaration is performed in functional programming ?
- (f) List out the advantages of functional programming.
- (g) Discuss the programming techniques in PROLOG.
- (h) Explain the purpose of concurrent programming.

(8 × 5 = 40 marks)

**Part B**

2. (a) Explain the language syntax description notation for expression in C with examples.

*Or*

- (b) Briefly discuss how special cases in loops are handled. (15 marks)

3. (a) In brief discuss Object Oriented Programming.

*Or*

- (b) Explain how dynamic allocation of memory is performed in OOP. (15 marks)

4. (a) Discuss :

(i) Lexical scopes. (7 marks)

(ii) Type checking. (8 marks)

*Or*

- (b) Discuss how functional programming with lists is performed. (15 marks)

5. (a) Discuss the different types of programming techniques and its control in PROLOG.

*Or*

- (b) Discuss how to perform safe access to shared data in concurrent programming. (15 marks)

[4 × 15 = 60 marks]