

Total No. of Questions : 8]

[Total No. of Printed Pages : 2

[2]

Roll No

IT-5002 (CBGS)**B.E. V Semester**

Examination, November 2018

Choice Based Grading System (CBGS)**Principles of Programming Languages***Time : Three Hours**Maximum Marks : 70***Note:** i) Attempt any five questions.

ii) All questions carry equal marks.

1. a) Explain object oriented programming and logic programming with examples.
b) Explain the evolution of various programming paradigms in detail with suitable example.
2. a) Describe sequence control in various statements with suitable example.
b) What are various fields of an Activation Record? Explain how activation record will look like for every recursive call in case of factorial (5). Also draw activation tree for the same.
3. a) Explain in detail different stages in language translation.
b) Explain the various parameters passing mechanism with suitable example.

4. a) What are the different mechanisms for storage representation of structured data types? Also explain any two major storage management issues.
b) Explain procedure of encapsulation and message passing in programming language.
5. a) Explain the features of functional programming.
b) What is Exception handle? What are the design issues in Exception handling?
6. a) Explain stack dynamic local variables and static local variable with their advantages and disadvantages.
b) Discuss pointer along with its design issues. Also describe operations on pointer.
7. a) What is Logic programming? Explain it with respect to relation, rules, facts and queries.
b) What do you understand by Scope of a variable? Describe along with its different types.
8. Write short notes:
 - i) 4GL
 - ii) PROLOG
 - iii) Concurrency
 - iv) Static and Stack-Based storage management
