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## IT-5002 (CBGS)

## B.E. V Semester

Examination, December 2017

## 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 example.

b)  Explain the steps of compilation in PPL.

2.  a)  Explain sequence control within expression and statement.

b)  Explain the difference between in type coherence and type equivalence.

3.  a)  Explain design issue of sub program and parameter passing methods.

b)  Draw flow diagrams for the following program fragment:
Loop
     S1;
if E then exit end;
     S2;
End

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4.  a)  Discuss the design issues for subprograms.

b)  Define the following terms related to variables:
i)    Life time
ii)   Scope
iii)  Dynamic scope

5.  a)  Define abstract data types. What are the language design issues regarding abstract data types.

b)  Explain stack based and heap based storage management briefly.

6.  a)  What is monitors? What are its advantages and disadvantages over semaphores.

b)  Discuss C# threads.

7.  a)  Explain the following type of statement with respect to prolog:
i)    Fact statement
ii)   Rule statement

b)  Explain the use of predicate calculus in logic programming.

8.  a)  Explain language evaluation and Beakers Nous form briefly.

b)  What are various factors influencing the evaluation of programming language.

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