Code No: 07A40501 **R07** **Set No. 1**

II B.Tech II Semester Regular/Supplementary Examinations,May 2010
PRINCIPLES OF PROGRAMMING LANGUAGES
Computer Science And Engineering

Time: 3 hours **Max Marks: 80**

Answer any FIVE Questions
All Questions carry equal marks

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1. (a) What is a linker? Explain the responsibilities of the linker.
   (b) Explain the three methods of implementing a programming language. [8+8]
2. Explain in detail about the primary design issues for names. [16]
3. Write a short notes on:
   (a) Assertions
   (b) Operational semantics
   (c) Static semantics
   (d) BNF. [4+4+4+4]
4. (a) Write a haskel function that computes the volume of a sphere, given its Radius.
   (b) Describe the semantics of COND and LET. [8+8]
5. (a) Compare the dynamic binding of C++ and Java.
   (b) How are C++ heap allocated objects deallocated?
   (c) Explain different visibility levels in C++. [6+5+5]
6. (a) What is the basic concept of declarative semantics. Explain.
   (b) What are different forms of a prolog terms. Explain. [8+8]
7. (a) State the advantages and disadvantages of static variables and stack dynamic Variables.
   (b) Explain the default parameter passing methods in C#.
   (c) Give brief description about pass - by - copy parameter passing technique. [6+6+4]
8. (a) Describe narrowing and widening conversion.
   (b) What are the advantages of short circuit evaluation. Ilustrate with examples.[8+8]

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