

Roll No .....

**CS - 602**

**B.E. VI Semester**

Examination, December 2012

**Principles of Programming Languages**

*Time : Three Hours*

**Maximum Marks : 100**

**Minimum Pass Marks : 35**

**Note:** *Attempt all Five questions.  
All questions carry equal marks.*

- 1 (a) Differentiate between static & dynamic semantics.
- (b) Discuss the translation process of a compiler.

OR

2. (a) Discuss different language categories.
  - (b) What do you understand by program readability? Discuss this language design criteria with important characteristics.
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3. (a) What do you understand by primitive data types? Explain with suitable examples.
  - (b) Discuss Array with its design issues. Also discuss Heterogeneous, rectangular and jagged arrays.

OR

4. (a) Discuss pointer along with its design issues. Also describe operations on pointers.
- (b) Explain type binding in detail.

5. (a) What do you understand by procedure and function? Differentiate between the two with suitable examples.
- (b) What do you understand by scope of a variable? Describe along with its different types.

OR

6. (a) Discuss different parameter passing mechanisms in detail.
  - (b) Discuss generic functions in C++.
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7. (a) Discuss concept of abstraction. Also discuss floating point as abstract data type.
  - (b) Discuss stack based storage management.

OR

8. (a) Discuss concept of inheritance in C++.
  - (b) What do you understand by semaphores? How semaphores are used for synchronization of tasks.
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9. (a) What do you understand by Exception handling? Discuss Exception handling in C++.
  - (b) Discuss logic programming. Also give its applications.

OR

10. (a) What do you understand by 4GL? Discuss in detail.
- (b) Discuss functional programming in detail. Also list different functional programming languages.

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