

## B.TECH. DEGREE EXAMINATION, APRIL 2011

## Eighth Semester

Branch : Computer Science and Engineering

## PRINCIPLES OF PROGRAMMING LANGUAGES (R)

(Regular/Supplementary)

Time : Three Hours

Maximum : 100 Marks

## Part A

*Answer all questions.**Each question carries 4 marks.*

1. With reference to a language, explain the concept of a virtual computer.
2. List out and explain the issues of language design.
3. Differentiate between syntax and semantics.
4. Explain with example the implicit and explicit type conversion.
5. What is aliasing ? Explain with example.
6. What are the advantages of using GOTO statements for sequence control.
7. Write notes on recursive subprograms.
8. What is Polymorphism ? Explain.
9. What is exception ? How exception handling is done in JAVA ?
10. What are the advantages of parallel processing ?

(10 × 4 = 40 marks)

## Part B

*Each question carries 12 marks.*

11. Write briefly about the effect of environment on languages with reference to interactive environment.

*Or*

12. Define binding. Explain in detail different classes of binding time.
13. What is meant by declaration ? Briefly explain the purposes of declaration.

*Or*

14. Briefly explain how the type checking and type conversion is done in programming languages ?
15. Describe in detail the sequence control between statements.

*Or*

Turn over

16. Describe stack-based storage management in detail.
17. Discuss in detail the sequence control within expressions.

Or

18. Explain the general scheme of implementation of sub program sequence control and recessi program sequence control.
19. What is parallel processing ? Describe its principles and illustrate with suitable examples.

Or

20. Describe the Hardware Development in detail.

(5 × 12 = 60 n