

R09

Code: 9A05501

III B. Tech I Semester (R09) Supplementary Examinations, May 2012

PRINCIPLES OF PROGRAMMING LANGUAGES

(Common to Electronics & Computer Engineering & Computer Science & Engineering)

Time: 3 hours

Max Marks: 70

Answer any FIVE questions
All questions carry equal marks

- 1 (a) Explain different programming domains with example languages.
(b) Explain any two syntactic design choices that effect readability of a program.
- 2 (a) What is an ambiguous grammar? Explain with an example.
(b) Write BNF form for describing *if* statements and *lists*.
- 3 Explain implementation of arrays with examples.
- 4 (a) What are the differences between break statement of C++ and that of java?
(b) Give brief description about guarded commands.
(c) Write design issues for arithmetic expressions.
- 5 (a) Explain in detail the local referencing environment of a sub-program.
(b) Explain three semantic models of parameter passing.
- 6 (a) What is a task? What are different categories of tasks? Differentiate between task and subprogram.
(b) What is competition synchronization? Explain the need for competition synchronization.
- 7 Explain in detail exception handling in java with example.
- 8 (a) Write short notes on fundamentals of functional programming languages.
(b) With the help of a suitable example, explain the modules using python.
