

Code: 9A15403

B.Tech II Year II Semester (R09) Supplementary Examinations May/June 2017

PRINCIPLES OF PROGRAMMING LANGUAGES

(Information Technology)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions
All questions carry equal marks

- 1 (a) What is a programming environment? Explain different programming environments.
(b) What fetch execute cycle? Explain.
- 2 (a) Describe the approach of using axiomatic semantics to prove the correctness of a given program.
(b) Distinguish between operational semantics and denotational semantics.
- 3 (a) Explain various primitive data types with suitable examples.
(b) Define ordinal, enumeration and sub-range types.
- 4 (a) Explain the concepts of type conversions.
(b) Write relational operators of Ada, Fortran and C Based Languages
- 5 (a) What is a co-routine? Explain the concept of co-routine.
(b) What are three general characteristics of subprograms?
(c) What are the advantages and disadvantages of keyword parameters?
- 6 (a) Explain C# threading operations with examples.
(b) What are the advantages of monitors over semaphores?
- 7 (a) What is the purpose of Java finally clause?
(b) Distinguish data typing in Prolog and Ada.
(c) What is the name of all C++ exception handlers?
- 8 (a) Compare and contrast between functional and imperative languages.
(b) Write a detailed note on conditional expressions of Haskell.
