

CS 1014: STUDY GUIDE FOR TEST 1

Test 1 is scheduled for Tuesday, February 23, 1999. You will be required to answer all multiple choice questions in the test. Although most of the questions in the test will be on the materials covered from the course notes, you should study the materials from the course notes as well as from the textbook (chapters 1 to 3). You should be familiar with Fortran statements, keywords, functions etc. as introduced and discussed in the class so that you can easily understand and analyze a given Fortran code segment and answer questions following the code segment.

The following is a list of topics, keywords, etc. that you may use as a guide to prepare yourself for the test. However, the list is not inclusive. Depending on your background, you may also need to study materials outside the list as well.

Computer Systems:

Data, information, hardware, CPU, memory, input/output devices, storage devices, software, system software, application software, computer languages.

Programming Process & Design Methodology:

Problem-solving phase, maintenance phase, algorithms, pseudocode, program translation, top-down design, pseudocode, algorithms, software development method, program documentation.

Programming Fundamentals:

Programming errors, program development process, syntax and semantics, Fortran character set, Fortran program structure, Fortran coding rules.

Arithmetic Processing:

Variables, constants, data types, Fortran statements, assignment operator, arithmetic expressions, precedence of operations, expression evaluation.

Input-Output:

Formatted READ statement, formatted WRITE statement, FORMAT statement, format codes, I format code, F format code, TR format code, carriage-control characters, list-directed or unformatted READ statement, list-directed or unformatted WRITE statement, OPEN statement, CLOSE statement.

Preliminaries:

Read loop, intrinsic or built-in functions, SQRT function, INT function, REAL function, MOD function, SIN function, IABS function, ABS function, documentation.