

Quiz 1 Key  
CS-185, Spring '99, Dr. C. S. Tritt

1. Any 3 of the following:

CPU - Central processing unit. The brains of the system. Contained in the box we think of as the computer.

RAM - Random access memory. Contains running programs and data. Information lost when power is turned off or system is reset.

ROM - Read only memory. Contains program code (BIOS routines) that are needed to operate the computer. A source of possible Y2K problems in older systems. Newer systems use Flash ROM that can be updated using special software.

Mass Storage Devices - Hard drives, floppy diskettes, CD-ROM's. Permit "permanent" storage of program code and data.

Input Devices - Keyboard, mouse, scanner, etc. Allows information to be entered into the computer system.

Output Devices - Screen (a.k.a. the display or monitor), printer, sound cards, etc. Allows information to be output from computer system.

Communications Devices - Network card and modem. Allows computer to exchange information with other systems.

2. Any four of the following steps:

Problem analysis and specification.  
Data organization and algorithm design  
Program coding.  
Program execution and testing.  
Program maintenance and upgrades.

3. a) 4.8  
b) 2  
c) 0  
d) 1.4286

Fortran logic errors (order of evaluation and integer math) -2.5. Math errors -1.

4. `integer :: Work_days = 5 ! Work days per week`

Comment is optional, but recommended. Use of parameter -2. Leaving out 5 -5.

5. `Distance = Rate * Time / k_per_mile`

Use of `==` -5. Parenthesis may be used, but aren't required.

6. `write(*,*) Speed, Time`

Formatting not required, but acceptable if done correctly. Putting Speed and Time in quotes - 5. Use of two statements -1. Use of read -3.

7. *Stop* statements stop program execution. Programs may contain multiple *stop* statements. *End* statements stop compilation. Programs may contain only one *end* statement.

8. Cross out: R2-D2, Else and \$Payment  
Leave: Gopher, Count and Under\_Ground

9. `b = 3`  
`b = 5`  
`b = 8`  
`b = 12`

Math errors -1. Logic errors -7 to -9.

10. `a = 0.0`  
`a = 0.5`  
`a = 1.0`  
`a = 1.5`  
`a = 2.0`