COMPUTER PROGRAMMING APTITUDE TESTS

What are they?
Often if you are given aptitude tests for a computing job, these will be standard numerical, verbal and diagrammatic tests but sometimes you will get a programming aptitude test. Some of these use "pseudocode", flowcharting, or assembly language. You can find information at www.psychometrics-uk.com "How to pass professional level psychometric tests" by Sam Al-Jajjoka (Kogan Page 2001) has a chapter called "Psychometric Tests for IT Recruitment" with an example assembly language test. Ask at Careers reception to use our reference copy.

A Parity IT Aptitude Test is one which tests your suitability for Information Systems roles by probing your logical thinking and a disciplined approach to complex problems. Candidates don't need computing knowledge or strong mathematical ability just an ability to work through complex problems.

How it works?
You are given five increasingly complex problems to do over a day. The test does not have a time limit, but you need to record the time the test takes you. Most people take from three to six hours to complete the test. You are free to make beverages and take comfort breaks, and deduct this from the overall time from the start of test until you finish. Questions mix very long mathematical and programming problems e.g. keep following an arrow in different directions, and add numbers on different lines at the same time, until you find a certain digit.

You can't do much to prepare for this test. Only one test per year can be conducted, per type of test, per person. It is very much a pass or fail test so if you do feel “under the weather” or not at your best, say before you start the test.

Feedback from Kent students after tests at computing interviews
- I had a programming aptitude test. Simple command line language and practice examples with answers provided. Have to do simple maths with this computer language, similar to concept of registers in the ALU. Included WRT: write to screen, STO: store, SUB: Subtract etc. Also included conditionals and loops.
- I was given a "technical awareness test" which included the following questions:
  o What is on-chip cache?: Level 0, Level 1, Level 2;
  o How many bytes is 2^20?
  o Where are UNIX system configuration files kept?: /etc, /usr, /opt;
• Syntax checking test. Two types of code, X and Y, each has 4 rules. Check 40 lines of code, each is of a type, and see if they conform to their particular set of rules. (AXA) (Tip: When doing the syntax checking, it can be more productive to answer the questions NOT in the order as they appear, but looking for the type X questions and then answering the type Y questions. This way you don't have to keep switching the rules in your head. I've done the same test in both ways and found the second way was more productive.)

• UML diagram for animal/cat/dog - explain

• Questions on data structures (linked lists, array lists etc) and sorting algorithms. (Morgan Stanley)

• They gave me random on the spot maths questions that you had to think 'outside of the box' to solve. (Morgan Stanley)

• Abstract test, finding patterns etc. (AXA)

• Wireless internet standards: advantages of WAP over WEP

• Decide the next letter in a sequence e.g. a - c - e - g ..... ? See our Letter Sequences test.