Professional Practice and Ethics

Computer Science Tripos 2004 - Part IA Exam
Questions and Marking Scheme - Richard C. Jennings

1. (Four mark question):

1. Name at least four different types of ethical theory. (4 points)

> Five types of ethical theory are included on the course handout and were discussed in lectures. Several varieties of consequentialist and deontological theories, the two main types, were discussed so up to two varieties of each should each count for one point.

2. (Twenty mark question):

(a) The professional standards of the British Computer Society's Code of Conduct are organized into four groups of standards, each including at least three specific standards. State what is the general concern of three of the main groups and give an example of one of the standards of conduct included in each group you mention. (6 points)

> The BCS Code of Conduct is included in the course handout and was discussed in lectures.

(b) Suggest two arguments in favour of computer cracking and how one would reply to each argument. (4 points)

> Three arguments and replies are included in the course handout and were discussed in lectures. However, creative thinking may give rise to new arguments and/or new replies, and good arguments, even if not included in the course handout, should be awarded appropriate marks.

(c) How can institutional measures serve to control computer cracking? (2 points)

> This is the topic of the last paragraph (5. Institutional Safeguards) in the Computer Cracking section of the course handout and was emphasised in lectures. One point each to be awarded for mentioning institutional structure and institutional control.

(d) How can privacy exist when for virtually every fact about us there is at least one person who knows that fact? (1 point)
State two principles of the 1998 Data Protection Act and how each serves to protect privacy. (4 points)

> The answer to the first question is in paragraphs B.4-5 of the Data Privacy section of the course handout and this was thoroughly covered in lectures. The eight principles of the 1998 Data Protection Act are included in the course handout and were discussed in lectures. In keeping with the answer to the first question we would expect the principles to be explained in terms of how they control the collection and transmission of personal data.

(e) Name three types of law that protect intellectual property. (3 points)

> Copyright, trade secrets and patent law are included in the course handout and were discussed in lectures, but the law of trademark would also count for a point.

A copy of the course handout is included with these questions and associated marking scheme.

Richard C. Jennings