

## 2009 Paper 8 Question 11

### Security

- (a) Give *four* uses of anonymous communications other than censorship resistance. [4 marks]
- (b) Explain the role of latency in anonymous communications. What limits or costs does low latency impose? [4 marks]
- (c) Imagine you are a government censor, trying to identify which of your citizens are viewing forbidden websites through Tor.
- (i) If you are able to wiretap the Internet connections of any 1% of the population, what effective capability does this give against Tor users? [4 marks]
- (ii) If there are currently 1000 active Tor nodes, what extra capability would you acquire if you added a further 100 nodes under your control? Explain any assumptions you make. [4 marks]
- (d) If you are using Tor to escape censorship, how often should you change the circuit path you use? Explain your answer. [4 marks]