

## Introduction to the Use of Computers (IS50004A) Assignment 2 : 2012-13

You should construct your submission to this assignment as an HTML document, and make it accessible at the username- and password-protected URL <http://www.doc.gold.ac.uk/~maXXXyy/is50004a/assignment2/index.html> (replacing maXXXyy with your own user identifier). You **must** protect that URL by requiring a username and password, which you **must** e-mail to me (at [c.rhodes@gold.ac.uk](mailto:c.rhodes@gold.ac.uk)) to complete your submission. There are 15 marks available for the submission and formatting of the document, including clear expression and legible diagrams as well as suitable, standards-compliant HTML formatting and implementation of authentication.

[15]

1. This part is about the TCP/IP networking reference model.
  - (a) Name and describe each of the five networking layers in the TCP/IP 5-layer reference model. [5]
  - (b) For each of the networking layers, give an example of a device or protocol which is best described as belonging to that layer. [5]
2. This part is about computer components.
  - (a) Define the terms 'RAM', 'ROM' and 'magnetic storage'. [3]
  - (b) Draw a diagram of a logic circuit using two gates which can be used to store one bit of information. [4]
  - (c) Explain how the circuit you have drawn in part 2b works. [6]
3. This part is about security.
  - (a) Anonymity is the ability to have one's name or identity remain unknown. Describe and explain one way in which modern computing has made it easier to achieve anonymity, and one way in which it makes it more difficult. [6]
  - (b) Privacy is the ability to choose what aspects or behaviours to reveal to the wider world. Describe and explain one way in which modern computing has made it easier to achieve privacy, and one way in which it makes it more difficult. [6]

The deadline for this coursework is **Thursday 17th January 2013**. Submission will occur by sending an e-mail with username and password information, which will trigger the reading of the specified personal URL in your homepage on **igor**, the Department's server. It is your responsibility to make sure that the URL is accessible, the authorization is correctly implemented, and the content you intend to submit is ready when you send your e-mail, which must be received by the day of the deadline.