CPSC155a: Solution Set for First Hour Exam

Question 1:
   (a)

Application
Transport
IP (or Network)
Physical

   (b) IP (or Network)
   (c) 3: DNS
   (d) 4: All of the above
   (e) True

Question 2:
   (a) Real Networks, Netscape, Adobe (only one needed for full credit)
   (b) False
   (c) "Number of Impressions," "Click Through," "Pay-per-sale" (only two needed for full credit)
   (d) True
   (e) b: Multi-channel retailing

Question 3:
   (a) c: The original Gnutella
   (b) b: Contributory and vicarious copyright infringement
   (c) (only one is needed for full credit)
      • Non profits may circumvent to shop.
      • Law-enforcement and intelligence agencies may circumvent in order to do things that they are otherwise lawfully entitled to do.
      • Reverse engineering to achieve interoperability of computer programs
      • Encryption research
      • Protection of personally identifying information.
   (d) a: The "Street Performer" model
   (e) False

Question 4:
   (a) Encryption – Scrambling of digital documents so that, while in transmission or storage, they are unintelligible to eavesdroppers
      Digital Signature – Assured provenance of digital documents
      Watermarking – Detection of unauthorized copies of digital documents
   (b) VeriSign
   (c) Content-distribution system: Digital Video Disks (DVDs)
      Circumvention tool: DeCSS
   (d) True

Question 5:
  (a) (only 3 are needed for full credit)
- Sell data (*e.g.*, in the form of individual customer profiles or in the form of statistical aggregates) to third parties.
- Share the data with another company as part of a commercial partnership.
- Targeted advertising to customers
- Develop better versions of products or services, using information about how customers *actually* use the current versions of those products and services.
- Improve performance of existing services, *e.g.*, by creating "cookies" that permit short-circuiting of long sequences of menu choices.
- Count the number of plays or downloads of a copyright work for purposes of artist compensation (*e.g.*, through payment to clearinghouses like ASCAP/BMI).
- Caching, replication, and network-load balancing, *e.g.*, in response to unexpected spikes in demand for a particular piece of content.

  (b) Microsoft

  (c) (only one is needed for full credit)
- Those expectations were fundamentally unrealistic. In particular, the "pay-per-sale" revenue model, in which advertisers pay only for the number of sales that result from users' clicking through their ads to sites that offer their products, is based on a drastically oversimplified understanding (indeed, a misunderstanding) of how successful ads work.
- The production quality of online ads is not as good as that of the best TV, radio, and print ads.
- Online ads are often either easy for users to ignore or, in the case of pop-ups, obnoxious. Neither type makes users want to buy the advertised products.
- People are often working or, more generally, engaged in purposeful activity when they're online and hence may be less receptive to advertising than they are when passively watching TV or listening to the radio.