

Study questions on IT and Society

Multiple-choice questions below are intended for sampling for self-tests to see if you are ready for a quiz. The multiple-choice quizzes will ask students to choose the best of several possible answers.

The recommended way of using these sample questions is to see if you can answer a question or two on a topic or subtopic correctly; if so, you may have the facts down; if not, you may wish to look at the course material some more. Knowing the reason for the correct answer is more helpful than knowing the correct answer.

For essay or discussion questions, good answers will take account both of the IT and the social aspects, and will acknowledge reasons on both sides of a position.

Introduction

1. Technical background
2. Social, ethical, and legal background
3. Privacy
4. Free expression
5. Intellectual property
6. Work, culture, and education
7. Risks, ethics, and evaluation of IT
8. The information economy and globalization

Summary (multiple topics)

1. (a) ; (b) ; (c) ; (d) ; (e) none of these
2. (a) ; (b) ; (c) ; (d) ; (e) none of these
3. (a) ; (b) ; (c) ; (d) ; (e) none of these
4. (a) ; (b) ; (c) ; (d) ; (e) none of these

Study questions on Introduction

Multiple choice

1. IT is claimed by the textbook author and instructor to embody and have an effect on (a) political theories; (b) changing social policies and values; (c) consumerism; (d) isolation; (e) none of these
2. This course has the perspective of (a) computer science; (b) sociology; (c) computer science and sociology; (d) ethics; (e) several disciplines
3. A feature of IT that we focus on throughout this course is (a) power; (b) speed; (c) communication; (d) change; (e) none of these
4. We consider the Internet in this class primarily in relation to (a) hardware; (b) software; (c) ideas; (d) people; (e) none of these
5. The classroom setting is viewed here chiefly as a (a) listening place; (b) network; (c) hierarchy; (d) democracy; (e) none of these
6. In this classroom assignments are accepted (a) only on time; (b) late with penalty; (c) late without penalty; (d) as written by two or more students; (e) none of these
7. Direct use of text found on the Internet (a) is free without attribution; (b) requires a reference; (c) requires quoting and a reference; (d) costs money; (e) none of these
8. Academic honesty is of concern to (a) students only; (b) instructors only; (c) the College community; (d) entertainers; (e) the Student Life office
9. Plagiarism is (a) claiming another person's work as one's own; (b) copying exam answers; (c) copying exam questions; (d) unauthorized collaboration; (e) none of these
10. Cases of alleged academic dishonesty (a) stay between student and instructor; (b) are discussed among instructors; (c) may go to the office of the Dean of Students; (d) are adjudicated in court; (e) none of these
11. The basic objectives of the course include (a) memorizing facts; (b) agreeing with the instructor; (c) agreeing with the textbook; (d) working in a team; (e) writing programs
12. The basic objectives of the course include (a) memorizing facts; (b) agreeing with the instructor; (c) agreeing with the textbook; (d) presenting to a group; (e) writing programs
13. The basic objectives of the course include (a) memorizing facts; (b) agreeing with the instructor; (c) agreeing with the textbook; (d) documenting research; (e) writing programs
14. Central classroom guidelines are (a) taking notes and getting facts; (b) attending class and being on time; (c) focus and mutual respect; (d) listening and remembering; (e) none of these
15. Attainment of objectives counts for ____% of final grade in this course (a) 0; (b) 10; (c) 30; (d) 50; (e) 100
16. Assignments count for ____% of final grade in this course (a) 0; (b) 10; (c) 30; (d) 50; (e) 100
17. Multiple-choice quizzes count for ____% of final grade in this course (a) 0; (b) 10; (c) 30; (d) 50; (e) 100
18. Problem-solving quizzes count for ____% of final grade in this course (a) 0; (b) 10; (c) 30; (d) 50; (e) 100
19. Final exam counts for ____% of final grade in this course (a) 0; (b) 10; (c) 30; (d) 50; (e) 100
20. Preparation and participation count for ____% of final grade in this course (a) 0; (b) 15; (c) 30; (d) 50; (e) 100
21. In this course, the relationship between IT and society is said to be (a) unidirectional; (b) absolute; (c) mutual; (d) pathological; (e) none of these

Study questions on topic 1: Technical background

1. History of computing

1. The early history of IT includes (a) steel mills; (b) coal mines; (c) census tabulation; (d) astronomy; (e) none of these
2. The early history of IT includes (a) steel mills; (b) coal mines; (c) developments in mathematics; (d) astronomy; (e) none of these
3. The early history of IT includes (a) steel mills; (b) coal mines; (c) mechanical computing machines; (d) astronomy; (e) none of these
4. The history of IT includes (a) steel mills; (b) coal mines; (c) looms; (d) astronomy; (e) none of these
5. Prices of semiconductors have ____ since 1950 (a) risen; (b) fallen; (c) remained the same; (d) fluctuated wildly; (e) none of these
6. Computer technology is based on (a) resistors; (b) capacitors; (c) transistors; (d) relays; (e) none of these
7. The microprocessor was introduced in (a) 18th century; (b) 19th century; (c) 1900-1950; (d) 1951-1985; (e) 1986-2010
8. Since 1960, the cost of data processing, per operation, has (a) fallen sharply; (b) fallen slightly; (c) stayed the same; (d) risen slightly; (e) risen sharply
9. Today's computers use (a) vacuum tubes; (b) semiconductors; (c) single-transistor components; (d) relays; (e) none of these
10. The Internet was ____ from the start (a) centralized; (b) PC based; (c) web based; (d) decentralized; (e) none of these
11. Cybertechnology is equivalent to (a) the Internet; (b) information technology; (c) software; (d) hardware; (e) none of these
12. Information is (a) data; (b) organized and communicated data; (c) feedback; (d) experience; (e) judgment
13. Cybernetics relates most closely to (a) the Internet; (b) computers; (c) feedback-driven systems; (d) intelligence; (e) none of these

2. Hardware and operating systems

1. Data with meaning is (a) binary; (b) in words or numbers; (c) information; (d) accurate; (e) none of these
2. Information technology is (a) a department; (b) tools and devices for processing meaningful data; (c) hardware; (d) software; (e) none of these
3. An operating system provides services for (a) applications; (b) remote sites; (c) hardware; (d) Microsoft Corp.; (e) surgeons
4. Which is *not* an operating system: (a) Linux; (b) Internet Explorer; (c) Windows; (d) Mac OS; (e) all are operating systems
5. Windows is (a) application software; (b) hardware; (c) a Web app; (d) an operating system; (e) none of these

6. Application software (a) serves operating systems and users; (b) is served by operating systems; (c) serves applications; (d) is subordinate to the hardware; (e) none of these
7. A file system is hierarchical in that it (a) gives orders; (b) receives orders; (c) makes some entities more important than others; (d) has folders within folders; (e) none of these
8. A standard file system is (a) egalitarian; (b) organized manually; (c) hierarchical; (d) accessed only by applications; (e) none of these
9. Which is *not* hardware? (a) general-purpose computer; (b) operating system; (c) video game console; (d) printer; (e) all are hardware
10. A hard disk is (a) application software; (b) operating-system software; (c) hardware; (d) hardware and software; (e) none of these
11. A DVD player is (a) application software; (b) operating-system software; (c) hardware; (d) hardware and software; (e) none of these
12. RAM is (a) application software; (b) operating-system software; (c) hardware; (d) hardware and software; (e) none of these
13. A bit's value (a) is 0 to 255; (b) is 0 or 1; (c) fills a register; (d) fills a memory cell; (e) corresponds to a color pixel
14. Of the following, the smallest is: (a) bit; (b) kilobyte; (c) megabyte; (d) byte; (e) word
15. All data is stored by computers in what form? (a) analog; (b) digital; (c) megabyte; (d) packet; (e) other
16. All data is stored by computers in what form? (a) analog; (b) bits; (c) megabyte; (d) packet; (e) other
17. What is fetched in the fetch-execute cycle? (a) instruction; (b) operand value; (c) record; (d) byte; (e) file

3. Networked computing and the Internet

1. Data is always transferred on the Internet in the form of (a) packets; (b) kilobytes; (c) files; (d) folders; (e) queries
2. A network (a) is a hierarchy of computers; (b) is any group of computers on the same wireless access point; (c) is a set of computers configured to communicate; (d) requires a central management structure; (e) none of these
3. Any set of computers communicating among themselves is a(n) (a) tree; (b) Internet; (c) network; (d) hierarchy; (e) none of these
4. Networked computing requires (a) communication standards; (b) a centralized structure; (c) wires; (d) use of the same kind of computer; (e) none of these
5. Bandwidth is (a) storage capacity; (b) processing speed; (c) data capacity of a communication channel; (d) size of a network cable; (e) none of these
6. Networking is an example of (a) centralized computing; (b) distributed computing; (c) Internet computing; (d) standalone processing; (e) none of these

7. A server is (a) any network node; (b) a piece of hardware that channels data among computers; (c) a computer that responds to requests for data on a network; (d) a piece of software that runs on all Internet-connected machines; (e) none of these
8. Peer-to-peer networks contain (a) many servers; (b) many workstations; (c) three computers; (d) two computers; (e) low-ranked users
9. Botnets are (a) viruses; (b) Trojan horses; (c) spam messages; (d) groups of computers controlled remotely without owners' permission; (e) none of these
10. A firewall (a) all access; (b) spam; (c) blocks phishing; (d) filters outside access to computers via the Internet; (e) none of these
11. Availability, integrity, authentication, confidentiality, and nonrepudiation are principles of (a) system use; (b) network infrastructure; (c) IT security; (d) software design; (e) database management
12. Authentication, access privileges, and firewalls help provide (a) reliability; (b) speed; (c) connectivity; (d) security; (e) storage space
13. Encryption (a) enables authentication of user ID; (b) examines packets to block unauthorized access; (c) scrambles data to be unreadable without a special key; (d) requires special hardware; (e) none of these
14. Secure web sites are (a) firewall protected; (b) password protected or encrypted; (c) government protected; (d) accessible via special hardware; (e) none of these
15. Authentication assures that (a) a computer is safe to use; (b) a website is safe; (c) only users with permission gain access; (d) facts at a website are correct; (e) none of these
16. Examining packets to block unauthorized outside access to a computer is done by (a) the user; (b) the network administrator; (c) a firewall; (d) encryption; (e) none of these
17. A number used to identify a device on the Internet is (a) an IP address; (b) a URL; (c) a formula; (d) a protocol; (e) none of these
18. The Internet is (a) a company; (b) a centralized unit; (c) a network of networks; (d) an idea; (e) a methodology
19. The Internet's infrastructure is governed by (a) the government; (b) one corporation; (c) a set of boards and consortiums; (d) no one; (e) all the users
20. The Internet is (a) a company; (b) a centralized unit; (c) a network of networks; (d) an idea; (e) a methodology
21. The Internet originated to address ____ problems (a) military; (b) sports; (c) business; (d) revenue; (e) none of these
22. The founding ideas of the Internet were (a) analog transmission and hierarchical control; (b) packet transmission and decentralized control; (c) analog transmission and decentralized control; (d) packet transmission and hierarchical control; (e) none of these
23. Visiting a web site is a case of (a) client/server computing; (b) FTP; (c) database design; (d) machine language; (e) procedural language
24. Which of the following is invoked when you type a query in Google? (a) a web crawler; (b) Internet Explorer; (c) a search engine; (d) a browser function; (e) none of these
25. Before Web 2.0, the Web (a) featured interactive browser-based applications; (b) was available on mobile devices; (c) consisted of static linked pages; (d) enabled sharing of videos; (e) hosted social networks
26. Web 2.0 relies heavily on (a) user involvement to make sites more attractive to new users; (b) the posting of content by large media outlets; (c) email; (d) menu-driven windowed interfaces; (e) command interfaces
27. Facebook is an instance of (a) windowed applications; (b) reliance on centrally created content; (c) command interfaces; (d) Web 2.0; (e) pre-Web 2.0
28. Wikipedia is an instance of (a) windowed applications; (b) reliance on centrally created content; (c) command interfaces; (d) Web 2.0; (e) pre-Web 2.0
29. YouTube is an instance of (a) windowed applications; (b) reliance on centrally created content; (c) command interfaces; (d) Web 2.0; (e) pre-Web 2.0
30. Blogs are an instance of (a) windowed applications; (b) reliance on centrally created content; (c) command interfaces; (d) Web 2.0; (e) pre-Web 2.0
31. Web 2.0 evolved under the influence of (a) corporate mergers; (b) user demand; (c) universal broadband connectivity and Internet mobile devices; (d) HDTV; (e) none of these
32. Web 2.0 is associated with a culture of (a) stars; (b) participation; (c) violence; (d) alienation; (e) soft music
33. The Internet originated to address ____ problems (a) military; (b) sports; (c) business; (d) revenue; (e) none of these
34. The Internet originated in (a) the 19th century; (b) the 20s or 30s; (c) the 40s or 50s; (d) the 60s or 70s; (e) the 80s or 90s
35. The founding ideas of the Internet were (a) analog transmission and hierarchical control; (b) packet transmission and decentralized control; (c) analog transmission and decentralized control; (d) packet transmission and hierarchical control; (e) none of these
36. Network communication is characterized by (a) limited scope; (b) easy identification of all communicators; (c) reproducibility of information; (d) only one-to-one interaction; (e) none of these
37. A new feature introduced by Web 2.0 is (a) hyperlinking; (b) social networking; (c) downloading; (d) E business; (e) none of these
38. A feature associated with Web 2.0 is (a) hyperlinking; (b) video sharing; (c) downloading; (d) E business; (e) none of these
39. A new feature introduced by Web 2.0 is (a) hyperlinking; (b) video sharing; (c) downloading; (d) E business; (e) none of these

4. Text formatting, spreadsheets, and database management

1. MS Word is (a) application software; (b) operating-system software; (c) hardware; (d) hardware and software; (e) none of these
2. PowerPoint is (a) application software; (b) operating-system software; (c) hardware; (d) hardware and software; (e) none of these
3. Named styles are an example of (a) slick hardware; (b) system software; (c) global control of formatting; (d) relative referencing; (e) none of these
4. An MS Word named style is like the PowerPoint Master Slide View in that (a) it is stored on disk; (b) it is stored in the processor; (c) it is hardware; (d) it offers global control of formatting; (e) none of these
5. To be able to control the formatting of all headings in a document at once, it is recommended to use (a) table of contents; (b) print view; (c) named styles; (d) search and replace; (e) none of these
6. Text that can appear automatically in a printed document includes (a) exported data; (b) page headers; (c) section headings; (d) tables of contents; (e) named styles
7. Collaboration among people working on the same document is aided by (a) Track Changes; (b) page headers; (c) named styles; (d) search engines; (e) blogs
8. Excel is (a) application software; (b) operating-system software; (c) hardware; (d) hardware and software; (e) none of these
9. One of the chief features that distinguish a spreadsheet from a word processor is (a) styles; (b) formatting; (c) export features; (d) calculated formulas; (e) none of these
10. A spreadsheet is a (a) sequential list; (b) tree; (c) network; (d) grid or matrix; (e) text file
11. Automatic calculation of values is a principle of (a) word processing; (b) presentation graphics; (c) web posting; (d) spreadsheet software; (e) application design
12. Spreadsheet cells may contain
 - i. named styles
 - ii. Labels
 - iii. numbers
 - iv. Formulas
 (a) i, ii, and iii; (b) i, ii, and iv; (c) ii and iii; (d) ii, iii, and iv; (e) iii and iv
13. A rule for information integrity is to use formulas to generate (a) all values; (b) no values; (c) any values that are important; (d) any values that depend on other values; (e) none of these
14. A database normally consists of (a) pixels; (b) tables; (c) keys; (d) protocols; (e) none of these
15. In a database, an object or instance corresponds to a (a) record; (b) table; (c) bit; (d) relation; (e) all of these
16. In a database, a category or class of objects is implemented by a (a) record; (b) table; (c) bit; (d) number; (e) device
17. A database table's columns correspond to (a) records; (b) tables; (c) instances; (d) attributes; (e) all of these
18. A record is a(n) ____ of an entity (a) column; (b) field; (c) instance; (d) summary; (e) none of these
19. An attribute of a record is represented by a (a) column; (b) file; (c) instance; (d) summary; (e) none of these
20. An instance of an entity is a(n) (a) attribute; (b) column; (c) table; (d) record; (e) none of these
21. To display information from a database, we use a (a) format command; (b) named style; (c) master page; (d) query; (e) all of these

Longer answer

1a. Hardware and operating systems

1. Define and distinguish: operating systems and systems of networked computers.
2. Describe the category of software that offers services to applications. What other services does it offer? Give two examples of this kind of software.
3. What do Windows, Linux, the Mac OS, and the Droid OS have in common? Explain.
4. Explain how when you use a program like MS Word or Excel, you sometimes are making use of an operating system.
5. What unit of storage is used in all instances of information technology, and why?
6. Describe how a computer program executes at the hardware level.
7. Distinguish *analog* and *digital* data, with examples of each.

1b. Concepts of major office applications

1. How did the appearance of spreadsheet software change the work lives of people in business careers?
2. Distinguish database management software, spreadsheet software, and web browsers.
3. How is global control of formatting implemented in MS Word? Why is this considered a good idea?
4. How does a user avoid repetitious tasks like formatting text the same way over and over?
5. Why are MS Word named styles used, rather than just formatting blocks of text with the Font and Paragraph dialogs?
6. Describe a software feature that would allow you to format a long word-processing document in such a way that the font of all the headings can easily be changed later.
7. Use *Track Changes* to edit a document. Submit a *.doc* file with the edits showing.
8. Under what conditions are spreadsheet formulas used, and why are they used instead of ordinary numerals?
9. The course materials recommend that all numbers in a spreadsheet be specified in a certain way if they depend on other numbers. What is that way and what is the reason it is used?
10. When and why is it recommended to use formulas in spreadsheets, when entering the numbers might sometimes be just as convenient?

11. Give features of a database table and what the features represent.
 12. What do columns in a database table represent?
 13. What do rows represent in a database table?
 14. What is a database query?
 15. How does a wiki work? Briefly review and evaluate your experience with a wiki in this course.
 16. Compare your experience constructing a document by wiki with other ways of creating documents.
5. What are *networks*, *servers*, and *packets*, and how are they related?
 6. What is required for computers to communicate and work together?
 7. Just after you send an email, where does your message reside, physically?
 8. What does the client communicate to a web server, and what does the server communicate to the client?
 9. What is client/server computing? Give an example.
 10. What is authentication used for?
 11. What do firewalls do and how?
 12. What are some forms of malware?
 13. What is encryption for?
 14. Distinguish the World Wide Web from the Internet.
 15. What is a browser and how does it work?
 16. What are two ways to use a URL to visit a web site?

1d. Networks

1. Describe synchronous and asynchronous cases of:
 - phone communication
 - IM
 - email
2. What is a protocol?
3. What is a network server?
4. Describe some advantages and inconveniences of networked computing as opposed to the use of stand-alone workstations.

Study questions on topic 2: Social, ethical, and economic background

Multiple choice

1. Scope of our inquiry

1. Knowledge is best said to represent (a) data; (b) experience; (c) information; (d) communication; (e) action
2. Which is *not* considered a reason why the Internet creates new ethical challenges? (a) speed of communication; (b) interactiveness; (c) people do harmful things; (d) easy reproducibility of information; (e) none of these
3. A feature of computer technology with social consequences is (a) ethical ambiguity; (b) philosophical nondeterminism; (c) logical malleability; (d) human incompetence; (e) none of these
4. Knowledge is most closely related to (a) experience; (b) news; (c) entertainment; (d) sentiments; (e) none of these
5. The arrival of *digital* media has a special effect on society in that it (a) provides better quality; (b) is more expensive; (c) is less expensive; (d) can store any intellectual object; (e) none of these
6. A significant new feature of computer technology with ethical implications is (a) variety of media; (b) mass distribution of music; (c) malleability of information; (d) control of content by powerful institutions; (e) none of these
7. The *malleability* of information is (a) high communication speed; (b) the ability of anyone to shape it; (c) low cost; (d) high value; (e) none of these
8. Sociology examines primarily (a) individual or couple behavior; (b) law and government; (c) philosophy and ethics; (d) class, family, community and power; (e) none of these
9. Ethics is a branch of (a) sociology; (b) computer science; (c) philosophy; (d) law; (e) none of these
10. Law consists of (a) theories of ethics; (b) mandated rules of conduct; (c) scientific results; (d) temporary resolutions of power struggles; (e) none of these
11. Economics is concerned with (a) the greatest good; (b) the pursuit of luxury; (c) choices about scarce resources; (d) choices about ethics; (e) none of these

2. Foundations of ethics

1. The most common view among experts is that changes in information technology (a) raise no new ethical questions; (b) raise ethical issues for IT professionals only; (c) raise some new ethical issues for almost everyone; (d) completely change society's ethics standards; (e) all of the above

2. A major factor in raising ethical and legal issues is (a) malleability of information; (b) accuracy of processing; (c) hard-disk speed; (d) interoperability; (e) none of these
3. A major factor in raising ethical and legal issues is (a) unreliability of communication; (b) accuracy of processing; (c) opportunities for anonymity; (d) interoperability; (e) none of these
4. A major factor in raising ethical and legal issues is (a) unreliability of communication; (b) accuracy of processing; (c) hard-disk speed; (d) cheap copying; (e) none of these
5. The notion of judging acts by their results is central to the _____ theory of ethics (a) utilitarian; (b) Kant; (c) rule-based; (d) deontological; (e) none of these
6. Negative rights are (a) claim rights; (b) liberties; (c) obligations to provide resources; (d) considered unethical; (e) none of these
7. Positive rights are (a) claim rights; (b) liberties; (c) obligations not to prevent action; (d) universally accepted; (e) none of these
8. According to the textbook, ethics assumes (a) rationality; (b) emotionality; (c) random behavior; (d) evil intentions; (e) none of these
9. The notion of rules that apply universally is central to the _____ theory of ethics (a) utilitarian; (b) consequentialist; (c) Mill; (d) deontological; (e) none of these
10. The notion of judging acts by their results is central to the _____ theory of ethics (a) Kant; (b) consequentialist; (c) Mill; (d) deontological; (e) none of these
11. Claim rights are (a) liberties; (b) negative rights; (c) positive rights; (d) rights to insurance payments; (e) rights to health care
12. Liberties are (a) rights to be provided with a benefit; (b) negative rights; (c) positive rights; (d) rights to insurance payments; (e) rights to health care

3. Informationalism

1. Anonymity _____ on the Internet (a) is enabled in new ways; (b) does not exist; (c) is universal; (d) is considered unethical; (e) none of these
2. The informational mode of development is distinguished by (a) exclusion of humans; (b) application of knowledge to knowledge; (c) machine intelligence; (d) economic growth; (e) none of these
3. Whereas informationalism is aimed at technical development, industrialism was aimed at (a) applying knowledge to knowledge; (b) universal higher education; (c) communication among all humans; (d) economic growth; (e) none of these

4. The information-technology revolution is said to have taken place as part of a (a) collapse of capitalism; (b) restructuring of capitalism; (c) rise of statism; (d) cultural blossoming; (e) breakthrough in scientific thinking
 5. It is said that societies are associated most closely with relationships of (a) technology; (b) ethics; (c) philosophy; (d) culture; (e) production and power
 6. The network society is said to be associated with (a) feudalism; (b) sexism; (c) communitarianism; (d) informationalism; (e) hierarchies
 7. Industrialism is said to be a (a) mode of production; (b) mode of development; (c) cultural trend; (d) technical approach; (e) philosophical school
 8. Informationalism is said to be a (a) mode of production; (b) mode of development; (c) cultural trend; (d) technical approach; (e) philosophical school
 9. Capitalist enterprises are driven by maximization of (a) technology; (b) production; (c) profit; (d) culture; (e) conflict
 10. Keynesianism was replaced by (a) regulation; (b) deregulation; (c) nationalization; (d) socialism; (e) protectionism
 11. Internet use is said to have increased (a) socialization; (b) test scores; (c) competition; (d) trusts; (e) central control of the market
 12. Capitalism is said to be (a) statism; (b) a mode of production; (c) a mode of development; (d) unchanging; (e) none of these
 13. Informationalism is said to be (a) statism; (b) a mode of production; (c) a mode of development; (d) unchanging; (e) none of these
 14. Statism is said to be (a) statism; (b) a mode of production; (c) a mode of development; (d) unchanging; (e) none of these
 15. The informational mode of development is characterized by the action of (a) machinery on machinery; (b) energy on machinery; (c) energy on energy; (d) knowledge on machinery; (e) knowledge on knowledge
 16. IT has enabled (a) profit maximization; (b) wage maximization; (c) a merger process; (d) stable methods of management; (e) none of these
 17. A free market is said to be (a) well managed; (b) centralized; (c) decentralized; (d) free of technology; (e) none of these
 18. A key new element in the global networked economy is said to be (a) computers; (b) the application of knowledge to knowledge; (c) human involvement; (d) mass production; (e) mass culture
 19. A new level of application of knowledge to itself is enabled by (a) the brain; (b) society; (c) telephones; (d) information technology; (e) none of these
 20. Output yield per unit of input is (a) speed; (b) power; (c) profit; (d) employment; (e) productivity
 21. Productivity is (a) the rate of employment; (b) the rate of profit; (c) output yield per unit of input; (d) profit per unit of input; (e) none of these
 22. IT is closely associated with (a) world travel; (b) buying and selling; (c) a customer-focused business strategy; (d) expert knowledge; (e) none of these
 23. The customer-centric enterprise is associated with (a) mass culture; (b) mass production; (c) mass customization; (d) automation; (e) computer billing
 24. A mode of development in which productivity is enhanced by the action of knowledge on knowledge is (a) statism; (b) capitalism; (c) industrialism; (d) informationalism; (e) nationalism
 25. Informationalism enhances productivity by (a) speeding up all processes; (b) applying knowledge to knowledge; (c) automating payrolls; (d) enabling videoconferencing; (e) none of these
- #### 4. Globalization
1. The informational economy (a) is global; (b) deemphasizes profit; (c) is no longer concerned with productivity; (d) is driven by the search for knowledge; (e) none of these
 2. In the era of globalization, information technologies are appearing that enable (a) faster cars; (b) greater energy consumption; (c) new kinds of collaboration; (d) slow communication at large distances; (e) none of these
 3. In the global era (a) vertical control replaces horizontal connections; (b) vertical control replaces bottom-up democracy; (c) horizontal connections replace vertical control; (d) horizontal connections replace bottom-up democracy; (e) none of these
 4. A significant factor enabling globalization was (a) communication standards; (b) high-quality automatic language translation; (c) the Java language; (d) mobile phone apps; (e) none of these
 5. Wireless Internet helped enable (a) the collapse of intellectual property; (b) the end of privacy; (c) globalization; (d) the end of the use of metal connections; (e) none of these
 6. According to the course materials, the world's population is segmented due to (a) ethnic differences; (b) military asymmetry; (c) occupational differences; (d) political differences; (e) concentration of wealth in a few countries
 7. A global economy is one that (a) has international trade; (b) uses fiber optics; (c) has international stock exchanges; (d) can work as a unit in real time; (e) none of these
 8. Globalization's goal was to unify all economies under the rules of (a) the U.S.; (b) the U.N.; (c) the market; (d) the Internet; (e) the IT industry
 9. The U.S. role in the global informational economy is (a) peripheral; (b) central; (c) military; (d) media-based; (e) ancillary

Short and longer answer questions on topic 2

2a. Social and economic factors in IT revolution

1. What world-economic events have driven the information revolution?
2. Explain the role of IT in addressing a problem of the capitalist economy.
3. What economic developments in the 1970s brought about the demand for IT that led to the IT revolution?
4. Account for the rise of the Internet.

2b. Social effects of computing

1. Compare *informationalism* with *industrialism*.
2. What generated informationalism?
3. What generated globalism, and when?
4. What is globalization and what is the role of IT in it?
5. Explain the relationship of *informationalism* to *capitalism*.
6. Explain the role of IT in the globalized economy.
7. Use the terms *informationalism*, *capitalism*, *industrialism*, and *statism* meaningfully in a paragraph.
8. What are some ways that capitalism has been restructured since the 1970s?
9. Describe different effects the Internet has on ethical systems, business or organizational policy, and legal philosophies.
10. To what degree does a problem referred to below result from digital information technology, and to what degree did the general problem pre-exist IT? Explain briefly.
 - a) ATM transactions enable tracking of our locations
 - b) Persons may record and share digital music heard on web radio broadcasts, infringing on copyrights
 - c) Digital medical records make it possible for office personnel other than doctors to obtain private patient information

2c. Ethics

1. Explain the two main theories of ethics.
2. What are the two main categories of *rights*? Give an example of one.
3. Which theory of ethics would argue that it is wrong to drive a car on a different side of the road from the customary one? Explain.
4. Differentiate *communitarian* from *liberalistic* views.
5. Distinguish positive rights from negative rights, with examples.
6. Distinguish *deontological* from *utilitarian* ethics.
7. What concerns guide *personal choices*, *business policies*, and *laws*?
8. Distinguish liberties from claim rights, with examples.

In answering the following questions, state and support your view, and give foundations for alternative views, and name a theory of ethics or rights that supports your view.

9. Is there an ethical obligation to obey a law or Netiquette guideline just because it is a law or custom?
10. If a behavior common on the Internet is legal, is it therefore not unethical? Give examples.
11. Does the IT revolution favor some ethical theories over others? Include specifics.
12. Describe different effects the Internet has on ethical systems, business or organizational policy, and legal philosophies.
13. Should business and government web sites be required by law to provide full access to disabled people? (Baase) What would be required?
14. Should the government lead in the development and application of information technology?
15. Is the use of IT in public services such as revenue and motor-vehicles registration adequate?
16. Does the IT revolution favor some ethical theories over others? Include specifics.

Study questions on topic 3: Security and privacy

Multiple choice

1. Crime, law enforcement, and IT

- The problem of “hacking” on the Internet is most generally associated with (a) stealing; (b) destroying data; (c) intrusion; (d) writing software in an unprofessional way; (e) poor writing
- Worms are (a) software that installs itself without authorization; (b) software that replicates itself; (c) web crawlers; (d) hidden messages; (e) none of these
- Viruses are (a) software that spreads due to infected media physically touching user hardware; (b) software that replicates itself; (c) web crawlers; (d) hidden messages; (e) none of these
- Sending millions of requests to web server is (a) fraud; (b) hacking; (c) a denial-of-service attack; (d) spam; (e) a privacy violation
- The USA PATRIOT Act is controversial because it authorizes (a) pre-emptive war; (b) warrantless searches of Internet traffic; (c) playing the Star Spangled Banner; (d) video surveillance; (e) no international data collection
- What monitors incoming data to filter out suspicious packets? (a) operating system software; (b) processor hardware; (c) memory; (d) application software; (e) firewall software
- Denial of service is (a) a server’s action toward the client; (b) the decision of an ISP regarding a customer; (c) a form of malicious Internet activity; (d) a client’s response to a server; (e) none of these
- Internet advertising is negatively affected by (a) auction fraud; (b) click fraud; (c) stock fraud; (d) digital forgery; (e) denial-of-service attacks
- Seizure of evidence is subject to (a) sole police authority; (b) attorney consent; (c) owner’s consent; (d) court-issued warrant; (e) none of these
- Sexting is (a) risqué emails; (b) web porn; (c) creation or dissemination of nude pictures, often of minors; (d) determining gender of newborns; (e) none of these
- Electronic devices (a) may be searched but not seized; (b) may be seized or searched any time police determine probable cause; (c) may be seized or searched subject to court warrant; (d) are exempt from search; (e) none of these
- An exception to restrictions on employer surveillance of workplaces is (a) nonexistent; (b) universal; (c) if the monitoring is in the ordinary course of business; (d) if the surveillance is announced when it occurs; (e) none of these

2. Definitions and theories of privacy

- Privacy is (a) a person’s control of the revelation of information about the person; (b) widely considered a human right; (c) often placed in question by the wide dissemination of data; (d) not guaranteed in workplace email systems; (e) all of the above
- The Fourth Amendment, regarding search and seizure, (a) is a typical consequentialist measure; (b) is a personal ethical guideline; (c) codifies a positive right; (d) codifies a negative right; (e) none of these
- The obligations of friendship are guaranteed by (a) legislation; (b) business policy; (c) personal decisions; (d) all of these; (e) none of these
- One theory of privacy defines it as (a) control of information about oneself; (b) control of information about others; (c) the use of soundproof walls; (d) absence from the Internet; (e) free speech
- A _____ view of privacy might accept greater access by society to personal data (a) liberalistic; (b) utilitarian; (c) libertarian; (d) communitarian; (e) none of these
- The communitarian view of privacy (a) elevates the autonomous self; (b) supports the “leave me alone” wish; (c) accepts society’s greater access to personal data; (d) rejects surveillance; (e) none of these
- The liberalistic view of privacy (a) elevates the autonomous self; (b) asks “What do you have to hide?”; (c) accepts society’s greater access to personal data; (d) supports surveillance; (e) none of these

3. Privacy issues raised by IT

- Encryption (a) provides complete privacy; (b) enables government inspection of messages; (c) provides security of varying reliability; (d) makes messages unreadable by the recipient; (e) all of the above
- Privacy in the electronic era includes (a) anonymity at all times; (b) control of dissemination of personal information; (c) sufficient time alone; (d) freedom from exposure to undesirable ideas; (e) none of these
- Privacy issues are raised directly by IT due to the (a) existence of data storage media; (b) existence of digital processing; (c) ease of copying and communication; (d) existence of curiosity; (e) none of these
- Ease of collecting data raises issues of (a) free speech; (b) protection of children from porn; (c) privacy; (d) intellectual property; (e) PC security
- Privacy may be strongly associated with (a) notoriety; (b) seriousness; (c) freedom to post on the web; (d) freedom to criticize; (e) anonymity
- Utilization of personal information for purposes of other than those for which it was provided is (a) felonious; (b) a copyright violation; (c) hacking; (d) secondary use; (e) libel

7. Analyzing and searching databases to find patterns and to enable analysis is (a) hacking; (b) data mining; (c) a privacy violation; (d) a free-speech violation; (e) a free-speech issue
8. Courts have ___ most company email and computer-file monitoring (a) upheld; (b) overturned; (c) investigated; (d) questioned; (e) none of these
9. Predicting behavior of an individual based on data analysis is (a) computer profiling; (b) data mining; (c) a claim right; (d) a denial-of-service attack; (e) libel
10. Categorical privacy is the right (a) not to be spammed; (b) not to be profiled; (c) not to be libeled; (d) to one's own records; (e) to be left alone
8. The ease of copying provided by IT (a) raises privacy concerns; (b) reduces privacy concerns; (c) resolves issues of privacy; (d) eliminates privacy; (e) none of these
9. The ease of communications provided by IT (a) raises privacy concerns; (b) reduces privacy concerns; (c) resolves issues of privacy; (d) eliminates privacy; (e) none of these
10. The ease of collecting data provided by IT (a) raises privacy concerns; (b) reduces privacy concerns; (c) resolves issues of privacy; (d) eliminates privacy; (e) none of these
11. One possible side effect of door-key IDs is (a) intellectual property violations; (b) warrantless search and seizure; (c) unauthorized publication of private data; (d) location monitoring; (e) none of these
12. The increased storage capacity provided by IT (a) raises privacy concerns; (b) reduces privacy concerns; (c) resolves issues of privacy; (d) eliminates privacy; (e) none of these
13. *Opt-in* means (a) data may be collected about a person unless the person requests otherwise; (b) a court warrant is required for data collection; (c) a person may choose to participate or not in data collection; (d) data about a corporation may not be released without its permission; (e) none of these
14. *Opt-out* means (a) data may be collected about a person unless the person requests otherwise; (b) a court warrant is required for data collection; (c) a person may choose to participate or not in a video conference; (d) data about a corporation may not be released without its permission; (e) none of these
15. Opt-in versus opt-out is a matter of (a) constitutional law; (b) civil law; (c) business policy; (d) personal ethics; (e) none of these
16. Opt-in versus opt-out relates to (a) privacy; (b) intellectual property; (c) security; (d) free expression; (e) none of these

4. Proposed protections

1. Fair Information Practices principles set standards for (a) limited collection of personal data, quality, and limitations on use; (b) government agencies that protect privacy; (c) penalties on invasions of privacy; (d) lawsuits over privacy issues; (e) computer hardware that might invade privacy
2. Established regulations on collection and processing of personal data include provisions of (a) legitimacy of purpose; (b) right to process "sensitive" data; (c) freedom from obligation to correct errors; (d) use for purposes not originally intended; (e) copyrighting
3. Established regulations on processing of personal data include provisions of (a) freedom from obligation to follow original purpose; (b) no processing of "sensitive" data; (c) freedom from obligation to correct errors; (d) use for purposes not originally intended; (e) copyrighting
4. Established regulations on processing of personal data include provisions of (a) freedom from obligation to follow original purpose; (b) freedom to process "sensitive" data; (c) obligation to correct errors; (d) use for purposes not originally intended; (e) copyrighting
5. Established regulations on processing of personal data include provisions of (a) freedom from obligation to follow original purpose; (b) freedom to process "sensitive" data; (c) freedom from obligation to correct errors; (d) obligation to use data for intended purpose; (e) copyrighting
6. _____ hides data in plain view (a) hacking; (b) encryption; (c) mass storage; (d) copyright; (e) surveillance
7. One technical solution to the problem of privacy is (a) legislation; (b) processing speed; (c) mass storage; (d) professional ethics; (e) encryption

Short and longer answer

Explain answers; give alternative views; cite facts; cite sources.

1. What does the Fourth Amendment say that law enforcement needs to have in order to search or seize property?
2. Give an example of how technology can turn surveillance into search.
3. Learn the privacy policy of
 - a. The social-networking site you use
 - b. The FSU student accounts, including email
 - c. An employer in this area

3a. Explain security issues raised by IT

1. Explain some forms of crime enabled by changes in IT. (3a)
2. What measures have been used to thwart computer-assisted crime? (3a)

3. What are *worms*, *viruses*, and *denial of service attacks*, and what are the related social concerns? What motivates perpetrators? (3a)
4. How does IT raise new issues related to security and crime? (3a)

3b. Explain and apply theories of privacy

1. Under what procedure and on what factual basis may law-enforcement agencies search and seize a computer at a home or workplace?
2. How have the notion and protection of *privacy* been affected by changes in technology?
3. The September 2010 news article, "US wants stronger wiretap powers over Web," reports that some law-enforcement officials asked the U.S. Congress to require that all communications-enabling services, including encrypted ones, have the technology capability to comply if served with an order to intercept communications content for surveillance purposes. Critics said that the proposal put in question fundamental aspects of Internet use. *Give technical and security reasons supporting the officials' request, and give reasons for challenging it.*
4. The November 2010 article, "Privacy is dead," reported that massive quantities of personal data about all of us are obtainable quickly on the Web. *What technical changes have brought this situation about? Give reasons to view it as unavoidable and reasons for trying to alter the situation.*
5. The December 2010 news article, "Panel set to study safety of electronic patient data," describes concerns about potential harm to patients due to malfunctions of systems for storing and retrieving patient data. Give reasons to support prioritizing (a) safety; (b) privacy; or (c) maximum data collection. *Give reasons to support a different priority from the one you chose. Include discussion of technical and ethical aspects of the issue.*
6. Is it ethical for targeted commercial or political marketing to attract individual interest by changing the terms of sale or political message according to the individual's preferences? Should the profiled person be informed of the profiling? Should the law enforce ethical standards in such cases? Justify.
7. In exchange for free email service, what restraints on the use of information are reasonable to expect from providers of free email services such as Gmail, Yahoo, and Hotmail?
8. Why are privacy issues raised by a systems in which an amusement park tracks customers' locations for anonymous traffic-monitoring purposes with an electronic card that is provided upon entry and discarded on exit from the amusement park?
9. What issues are raised by RFID tags on products?
10. What issues are raised by the IRS's reported loss of 2,000 computers in a four-year period?
11. How does IT change the considerations in deciding what personal records (bankruptcy, divorce, political contributions, property ownership) should be made public?
12. How does caller ID affect the privacy of the caller and call recipient?
13. Distinguish the communitarian and liberalistic views of privacy and explain what policy might follow from each view toward police monitoring of email.
14. What features of IT raise privacy issues for public discussion?
15. How have the notion and protection of *privacy* been affected by changes in technology?
16. Is it ethical for targeted commercial or political marketing to attract individual interest by changing the terms of sale or political message according to the individual's preferences? Should the profiled person be informed of the profiling? Should the law enforce ethical standards in such cases? Justify.
17. In exchange for free email service, what restraints on the use of information are reasonable to expect from providers of free email services such as Gmail, Yahoo, and Hotmail?
18. Why are privacy issues raised by a systems in which an amusement park tracks customers' locations for anonymous traffic-monitoring purposes with an electronic card that is provided upon entry and discarded on exit from the amusement park?
19. What issues are raised by RFID tags on products?
20. What issues are raised by the IRS's reported loss of 2,000 computers in a four-year period?
21. How does IT change the considerations in deciding what personal records (bankruptcy, divorce, political contributions, property ownership) should be made public?
22. How does caller ID affect the privacy of the caller and call recipient? Is there a natural human right to privacy that needs new protection today? Refer in your answer to developments in IT.
23. Is it wrong to take a picture with a cell phone without asking permission?
24. Is it wrong to post a picture on a web site without permission if the picture was taken with permission? Discuss.
25. How does IT raise new issues with respect to the use of cameras?
26. What is the Fourth Amendment, and what issues does IT raise with respect to it?
27. What do you think the Fourth Amendment means by "papers and effects" as applied in 2010? What does "seizure" mean?
28. How do modern surveillance tools change the meaning of "reasonable expectation of privacy"?
29. Does a bank own, or have the obligation to share with law enforcement, our account records? Share with other businesses?
30. Does curfew enforcement on young people justify use of video surveillance? Explain.
31. Give pros and cons of CCTV surveillance, citing cases on either side.
32. Give reasons for and against allowing use of digital cash.
33. Is "freedom from the inappropriate judgment of others" a good definition of privacy? (Baase)
34. Does Google Street View violate privacy?

35. How do cell phones change conditions of privacy? Security? What are some inconsiderate acts with cell phones? Crimes?
36. Baase, p. 40, #1.25 (video cam after political debate)
37. Baase, p. 40, #1.26 (creating fictional person on social networking site)
38. Baase, p. 133, #2.41 (privacy policy of a large site)

Study questions on topic 4: Freedom of expression

Multiple choice

1. Rights to free expression

- The first amendment to the U.S. constitution constrains (a) individuals; (b) businesses; (c) the government; (d) political parties; (e) none of these
- The First Amendment encodes a (a) positive right; (b) negative right; (c) notion of privacy; (d) notion of property; (e) none of these
- A legal guideline specifies that speech and action are (a) in the same category; (b) incompatible; (c) distinguished; (d) protected alike; (e) none of these
- An unprotected form of speech is (a) political; (b) economic; (c) religious; (d) repugnant; (e) defamation
- An unprotected form of speech is (a) political; (b) economic; (c) religious; (d) repugnant; (e) incitement
- An unprotected form of speech is (a) political; (b) economic; (c) religious; (d) repugnant; (e) spam
- An unprotected form of speech is (a) political; (b) economic; (c) religious; (d) repugnant; (e) threat
- According to our sources, widespread access to electronic media (a) raises dilemmas regarding freedom of expression; (b) limits need for first-amendment protections; (c) means that free expression is overused; (d) is harmful to free expression; (e) none of these
- Legal guidelines for application of the First Amendment state that conflicts should be resolved (a) quickly; (b) administratively; (c) in favor of persons asserting the right to express themselves; (d) by least-restrictive means; (e) by the market
- Censorship (a) implements the First Amendment; (b) suppresses speech condemned as subversive to the common good; (c) is a felony; (d) is advocated by libertarians; (e) none of these
- The U.S. Supreme Court has ____ legislation against transmitting any “indecent” material on the Internet (a) accepted; (b) modified; (c) rejected; (d) invited; (e) none of these
- The outcome of legal conflicts over regulation of content on the Internet indicates that (a) children will not see sexual content if they log in to the Internet; (b) parents will want to control what their children see; (c) Congress will regulate content as it sees fit; (d) the Supreme Court will regulate content; (e) none of these
- Content-blocking software is considered (a) foolproof; (b) reliable; (c) useful for detecting sexual images; (d) unreliable; (e) none of these
- According to our sources, risks concerning children are raised because (a) adults look for adult sex on the Internet; (b) sexual content is widely available for free on the Internet; (c) the Internet is full of sex; (d) the Internet encourages wanton sex; (e) laws encourage distribution of sexual images on the Internet

- ACLU recommendations related to libraries include (a) filters to protect children; (b) restricted Internet areas; (c) free speech as the default setting; (d) censorship; (e) content-based regulation of media

2. The global information infrastructure and democracy

- The democratic aspect of the global information infrastructure derives from (a) processor speed; (b) memory; (c) human connectivity; (d) a global democratization of political institutions; (e) none of these
- An allegedly undemocratic aspect of the global information infrastructure derives from (a) processor speed; (b) greater concentration of filtering and packaging power; (c) communications technology; (d) a global centralization of political institutions; (e) none of these
- In election campaigns, restrictions on use of soft money have recently been applied to (a) personal computer use; (b) web-based campaigning; (c) payrolls; (d) email; (e) none of these
- The global information infrastructure is said to combine (a) market and government; (b) left and right; (c) culture with business; (d) information technology with communications; (e) matter with energy
- The “power to the many” argument states that democracy (a) is bad; (b) is good; (c) is thwarted by the Internet; (d) is an inherent value of the global information infrastructure; (e) requires participation by everybody in all decisions

3. Unprotected expression

- Those liable for defamation may include (a) ISPs; (b) readers of defamatory information; (c) owners of computers used to view defamatory information; (d) publishers of defamatory information; (e) passive onlookers
- Anonymity (a) is disreputable in literary circles; (b) has been successfully outlawed from the Internet; (c) does not protect against consequences of libel; (d) is considered evidence of hostile intent; (e) none of these
- Spam (a) is considered by the courts to be free speech; (b) cannot be blocked by ISPs; (c) cannot be blocked by law; (d) was regulated by legislation in 2004; (e) none of these
- Pay-to-email is a (a) proposed solution to spam; (b) Internet fraud scheme; (c) way to promote spam; (d) way to reduce email; (e) none of these
- Challenge-response is a (a) child-protection technology; (b) measure against Internet defamation; (c) proposed solution to spam; (d) technique used in the classroom; (e) none of these

6. Net neutrality is a form of (a) antispam action; (b) regulation of Internet content; (c) regulation of telcoms' policies on Internet content; (d) election-campaign legislation; (e) none of these
7. Requiring telcoms to treat all content on broadband lines alike is (a) spam protection; (b) copyright protection; (c) child protection; (d) the digital divide; (e) net neutrality
8. Slander is (a) protected by the First Amendment; (b) defamation in writing; (c) oral defamation; (d) advocacy of unpopular views; (e) none of these
9. Libel is (a) protected by the First Amendment; (b) defamation in writing; (c) oral defamation; (d) advocacy of unpopular views; (e) none of these
10. Which is protected by the First Amendment? (a) disgusting adult web sites; (b) cyberbullying; (c) advocacy of violations of the law; (d) promises of physical harm; (e) spam
5. Discuss the questions of the publication on the Web of state documents without authorization, and the use of technology by young people in different parts of the world who seek more voice in choice of their leaders and government policies. Give specifics.
6. What are some concerns about free expression that have been raised by changes in information technology, and what changes have prompted these concerns?
7. How have developments in information technology raised new issues in relation to "community standards" as a legal measure of what adult material can be disseminated?
8. What are the main technical and integrity concerns raised in the controversy over electronic voting? (See handout, "Security of Electronic Voting is Condemned.")
9. Is limited access to some research materials on the Internet (in contrast to free library access) a problem? (Defend or refute.)
10. The 1997 paper by D. Johnson, "Is the global information infrastructure a democratic technology?" addresses a view about values embodied by the global information infrastructure and presents an alternative view. *What are the two views, and what reasoning supported them? What is your view? Do you think that the situation has changed in the last fifteen years enough to make a difference in this discussion?*

Short and longer answer

4a. Trade-offs between concerns about freedom of expression

1. Does the opportunity to broadcast negative messages to a large Internet audience preclude strong legal protection from defamation? (S&T)
2. Give reasons for and against: "IT opens up new threats to children's welfare that require regulation of Internet content."
3. Images may be altered by software to create fictional material that appears to be photographic. How may this affect legal discussions about freedom of expression?
4. Should there be a law against lying on the Internet?
5. Should the posting of web sites be licensed?
6. How has IT raised issues of free expression, including with respect to control of children's access to online content and the problem of defamation.
7. Describe how the Internet has changed the meaning of the word "publication" and legal implications of this change.
11. The December 2010 article, "F.C.C. is set to regulate net access," discusses efforts to support net neutrality. *What is net neutrality and what are reasons for regulating or not regulating communications for its sake?*
12. The June, 2011, article, "Justices reject ban on violent video games for children," discusses a law that banned the selling of certain video games to children. *Give reasons for a rise in legitimate concern about video games and reasons for opposing such legislation. Support your view with specifics.*
13. The March, 2011, article, "Assange: The Internet could create a 'totalitarian spying regime,'" discusses ways that the Internet may be used either by ordinary citizens or by governments to advance their causes. *What are some of these ways, and which kind of power do you think is enhanced more by the Internet today? Support your view with specifics.*
14. The December, 2010, article by J. Zhuo, "Where anonymity breeds contempt," describes ways that Web sites may curb anonymously posted inflammatory comments. *Discuss these ways and discuss pros and cons of applying them. Support your view with specifics and acknowledge alternative views to yours.*

4b. IT related opportunities for and risks to free expression

1. What new possibilities for freedom of expression and for abuses of freedom are raised by the Internet?
2. How do defamation legislation and the First Amendment constrain or define the obligations of ISPs as common carriers?
3. What is the global information infrastructure, and how does it expand and/or contract the space for freedom of expression?
4. What degree of anonymity does the Internet provide? Relate this to freedom of expression and to protection against defamation.

Study questions on topic 5: Intellectual property and IT

Multiple choice

1. Purpose and limitations

- The social purpose of recognizing intellectual property rights has been (a) to enable maximum profit; (b) to encourage innovation; (c) to discourage sharing; (d) to discover geniuses; (e) none of these
- Fair use is (a) justice; (b) copying for purposes of comment or research; (c) copying for resale; (d) use of copyrighted data at a fair price; (e) none of these
- Copyright (a) dates to the 18th century; (b) is primarily for the purpose of suppressing competition; (c) dates to the start of the Internet; (d) prohibits all copying; (e) none of these
- Intellectual artifacts (a) dissipate over time; (b) can be used by an unlimited number of persons; (c) are entirely due to their creators, rather than to previous work; (d) have no value; (e) none of these
- Intellectual property rights are widely considered to derive in part from (a) divine sanction; (b) royal decree; (c) labor invested in creation; (d) public approval; (e) none of these
- One limitation on intellectual property is (a) fair use; (b) universal acclaim; (c) reasonable doubt; (d) due diligence; (e) none of these
- Copyright protects (a) ideas; (b) profits; (c) expression of ideas; (d) inexperience; (e) none of these
- Derivative works are regulated by (a) patent; (b) trademarks; (c) trade secrets; (d) copyright; (e) copy protection
- After a legislated period, copyrighted works enter (a) a waiting period; (b) a fair-use zone; (c) the public domain; (d) litigation; (e) none of these
- Copying a video for later personal viewing is (a) a felony; (b) a misdemeanor; (c) a civil offense; (d) fair use; (e) net neutral

2. Issues raised by IT

- Legal intellectual-property rights have been ____ in the Internet age (a) reduced; (b) expanded; (c) rejected by the courts; (d) abandoned by industry; (e) none of these
- Homologization of information means that (a) all people have the same culture; (b) all computers work the same way; (c) all information is stored as bits; (d) all information is free to all people; (e) none of these
- Before IT (a) it was almost as hard to copy a book as to write one; (b) only publishers could publish books; (c) only writers could write books; (d) sharing information was easier; (e) data was more malleable
- Electronic publishing (a) increases costs; (b) increases risk; (c) decreases costs without effect on risk; (d) decreases costs and risk; (e) is illegal

- A technical factor in raising intellectual-property issues is (a) cost of paper; (b) ease of copying; (c) high cost of computers; (d) relaxed morals; (e) TV culture
- Electronic publishing (a) reduces costs; (b) increases financial risks; (c) increases costs; (d) resolves intellectual-property issues; (e) is illegal
- IT raises intellectual-property issues because (a) we live in a mass culture; (b) people are greedy; (c) people are generous; (d) copying is easier; (e) we live in an industrial society
- IT raises intellectual-property issues because (a) we live in a mass culture; (b) people are greedy; (c) people are generous; (d) malleability of information facilitates creation of derivative works; (e) we live in an industrial society
- IT raises intellectual-property issues because (a) we live in a mass culture; (b) people are greedy; (c) people are generous; (d) communication is cheaper; (e) we live in an industrial society
- IT raises intellectual-property issues because (a) we live in a mass culture; (b) people are greedy; (c) people are generous; (d) the medium is a tiny part of cost of production; (e) we live in an industrial society
- Malleability of information enables (a) cheap communication; (b) cheap copying; (c) cheap media; (d) creation of derivative works; (e) none of these
- Derivative works (a) are made more difficult by IT; (b) are made easier by IT; (c) are a financial product; (d) are prohibited; (e) none of these
- Derivative works (a) are made more difficult by IT; (b) are covered by copyright laws; (c) are a financial product; (d) are prohibited; (e) none of these

3. Software as intellectual property

- Software patents could be valid if software were viewed as (a) writing; (b) art; (c) invention; (d) ideas; (e) none of these
- Software (a) is not copyrighted; (b) is copyrightable; (c) is only seen as ideas; (d) can only be protected by patent; (e) none of these
- File sharing with copyright implications first became widespread with (a) the personal computer; (b) CDROMs; (c) the MP3 file format; (d) email attachments; (e) Limewire
- The music industry has faced significant difficulty with (a) iTunes; (b) peer-to-peer file sharing; (c) music sent as email; (d) the Congress; (e) none of these
- Software and electronic data are (a) sold, so that the customer has full decision power over the product (b) licensed, so that the customer agrees to restrictions on use; (c) always available for unrestricted legal copying; (d) always copyrighted by the distributor; (e) none of the above

6. The term “free software” means (a) software to borrow; (b) unlicensed software; (c) licensed software with permission to copy freely; (d) low-cost software; (e) copyright violation

4. Technical and legal solutions

1. One significant entertainment-industry measure to protect intellectual property rights has been (a) midnight raids; (b) declarations of war; (c) hardware copy protection; (d) withholding songs; (e) encryption
2. Devices that circumvent copy protection (a) are subject to lawsuit; (b) are protected by the courts as free speech; (c) are industry sanctioned; (d) are built into play-record devices; (e) none of these
3. DVD players were introduced (a) in a rapid way; (b) delayed by recording industry efforts; (c) in such a way as to encourage free copying; (d) in the 1970s; (e) none of these
4. Digital Rights Management allows (a) universal copying; (b) restricted use; (c) no use; (d) lawsuits; (e) criminal prosecution
5. Content scrambling (a) is a form of message encryption; (b) restricts DVD playing to special players; (c) controls Internet communication; (d) is a surveillance technique; (e) is a form of hacking
6. The No Electronic Theft act (a) reduced term of copyright ownership; (b) imposed copyright protection; (c) increased civil penalties for copyright violation; (d) criminalized circumvention of copyright protection; (e) criminalized copyright infringement
7. Recording a copyrighted film in a theater may be (a) done by YouTube; (b) a civil offense; (c) a criminal offense; (d) considered a friendly act; (e) none of these
8. Safe harbor is associated with (a) takedown notices about copyrighted material; (b) software piracy; (c) patenting software; (d) criminal profiteering; (e) none of these

Short and longer answer questions for topic 5

Answers to the following questions should refer to the role of IT or use IT-related examples and should acknowledge other points of view.

5a. Explain intellectual-property law

1. What does copyright law say? What are exceptions? Give IT-related reasons for stricter or looser enforcement of copyright today.
2. Distinguish criminal from civil law. Defend your view of whether criminal law should be used to enforce intellectual property rights on the Internet.
3. Should unauthorized software copying for personal use be subject to civil or *criminal* law? Give your view and alternative views, with reasons.
4. Are rights of attribution (author recognition) and integrity (non-alteration) more important than other intellectual property rights? How does IT raise this question?
5. Should electronic publishing have the same copyright law enforcement (penalties, etc.) as print publishing, or more, or less?
6. Should author gain more rights to authorize republication of work? (Defend or refute.)
7. What are the motivations for copyright law?
8. Explain why one person should have exclusive rights over something that everyone could possess and use at the same time.

5b. Reasons and ways to support intellectual property rights

1. What are some changes in information technology that have raised concerns about intellectual property? Explain.
2. Describe the safe-harbor concept. And give pros and cons.
3. What new issues are raised in the area of *intellectual property* by technical changes in the way information is generated, communicated, and processed in the information revolution?
4. Give reasons why the Internet has increased concern about enforcement of intellectual-property rights.
5. Give reasons why free sharing of data and media should be discouraged and encouraged.
6. What are ways in which some musicians and other artists survive or thrive financially while allowing free copying of their work?

7. Suggest ways for our society to support artistic creation without restricting the copying of data.
8. Give some ways that unauthorized digital copying and sharing is like, and unlike, robbing a bank.
9. The October, 2010, article, "Android invasion," describes the Android operating system as an open-source program, in contrast to iPhone's proprietary system. *Distinguish these terms and explain how the article raises for discussion matters of intellectual property and free flow of information because of technological changes it discusses.*
10. The July, 2011, article, "Information wars," asserts, "The war for humanity's future is primarily a war for control of the use and exchange of information." *Give reasons to agree and reasons to disagree with this claim, referring to the article's discussion of intellectual-property issues.*
11. The April, 2011, article, "Samsung countersues Apple on Iphone and Ipod patents," describes mutual lawsuits by Apple and Samsung over patent infringement. *Describe the issues of these lawsuits and give your opinion of the intellectual-property issues involved, and give technically-related reasons why these issues have arisen at this time in court.*
12. The article by S. Turow et al, "Would the Bard have survived the Web?", describes how copyright law originated centuries ago, supporting the principle that playwrights and others should be able to gain financial support for their intellectual work by limiting access to it and collecting compensation from consumer. *How does this article connect this history with information technology and issues under discussion today in our society? How do you respond to its point of view? What are alternative views?*
13. In the August, 2010, article, "Plagiarism lines blur for students in digital age," the author describes "a disconnect that is growing" between students and professors about plagiarism. Describe what you find in this article and agree or disagree with concerns expressed in it.
14. The March, 2011, article, "New York man faces five years in jail for 'linking' to online videos," describes government seizure of a web site and a criminal complaint based on the claim that linking a website to copyrighted material is a crime. *Describe the authorities' point of view and criticisms of it, giving their reasoning. Provide rationales for these viewpoints, based on course material.*

Study questions on topic 6: Work, education, and culture

Multiple choice

1. Economic and work-related effects of IT

- The IT revolution produces “job churn” in that
 - each job changes greatly;
 - jobs are gained;
 - jobs are lost;
 - some jobs disappear and others are created;
 - none of these
- The introduction of technology is associated with economic
 - growth;
 - contraction;
 - crisis;
 - stagnation;
 - none of these
- IT fosters ___ in the labor force
 - poverty;
 - prosperity;
 - investment;
 - flexibility;
 - none of these
- The transition to an informational society has been accompanied by
 - wealth for all;
 - poverty for all;
 - deterioration of living conditions for many;
 - universal happiness;
 - none of these
- IT enables changes that reduce labor costs to counter the
 - greed of a few;
 - laziness of all;
 - profit crunch;
 - glut of qualified technicians;
 - none of these
- In the informational economy, knowledge generation and ___ explain productivity and growth
 - high CEO salaries;
 - everyone doing what they’re told;
 - mass production;
 - communication;
 - low wages
- In the informational economy, activity shifts from goods to
 - profits;
 - services;
 - labor;
 - management;
 - none of these
- It is hard to distinguish ___ from services in an informational economy
 - goods;
 - labor;
 - management;
 - information;
 - profits
- In the informational economy, capital is more ___ than labor
 - productive;
 - profitable;
 - mobile;
 - useful;
 - oppressed

- Small businesses have access to the ___ market via the Web
 - food;
 - black;
 - hidden;
 - local;
 - global
- Computer-supported narrowing of a business’s focus may result in
 - reducing the sizes of many companies;
 - expanding the markets of many companies;
 - increasing the sizes of many companies;
 - increasing the number of management layers;
 - none of these
- IT-related factors fostering high performance in work do *not* include greater
 - skill level;
 - assembly-line speed;
 - teamwork;
 - worker autonomy and feedback;
 - any of these

2. IT in education

- Technology in education is said to decrease
 - interaction;
 - collaboration;
 - active learning;
 - delay time for instructor feedback;
 - engagement
- An example of a course management system is
 - Facebook;
 - Blackboard;
 - YouTube;
 - Merlot;
 - Web 2.0
- The concept of *active learning* pictures learning as
 - physical;
 - energetic;
 - fast;
 - interactive;
 - none of these
- In collaborative education, students
 - do all assignments together;
 - take tests in groups;
 - reinforce their own learning by supporting each other’s learning;
 - are not graded;
 - have more than one teach per classroom

3. Effects on culture

- Computer-mediated communication networks tend to be
 - slow;
 - centralized;
 - decentralized;
 - dominated by broadcast;
 - none of these
- Mass culture resulted from
 - control of broadcast media by governments and large firms;
 - mass participation in creating culture;
 - Web 2.0;
 - user involvement;
 - none of these

Short and longer answer questions for topic 6

6a

1. What changes has IT made in work life?
2. What effects have digital technologies had on the labor force?
3. What effects has IT had on the way enterprises are managed?
4. The article, "A meeting in New York? Can't we videoconference?" (May, 2009) describes a possible trend toward increased use of videoconferencing to replace business travel. *Do you see this trend going far? What technology changes have produced it and will determine its progress? What secondary changes in work life are implied?*

6b

1. How has IT affected education?
2. What experiences have you had with information technology at Framingham State College and before? What potential do you see for the use of academic technology?
3. Describe how IT is changing education.
4. What are *active learning* and *collaborative education*, and how do they relate to IT?
5. What specific forms of academic technology do you use and value at Framingham State University?
6. Describe how IT may have changed learning at FSU since 1990.
7. What have been pros and cons of your experience with IT in college, including with Blackboard?
8. The article, "Liberal arts colleges venture into unlikely territory: online courses," (June, 2011) reports a discussion in which a professor says, "You have created a way to teach students without faculty," and reports the reply of a researcher in online learning. *Describe this reply and explain what views of the relation between online learning and student-faculty interaction are advanced in this article. Support these views or an alternative view with information from your experience and reading.*

9. The article, "The University of Wherever" (October, 2011), describes a free online course in artificial intelligence, offered by Stanford University. One of the instructors names quality-control problems but predicts that if they are solved, "it will disrupt all of higher education." Another educator is quoted as emphasizing the importance of a physical campus. *Give arguments for both viewpoints and give your view. What changes have enabled this new development in higher education?*
10. The article, "Tuition lost on the techno-dependent" (September, 2010) argues that multitasking in environments like the classroom is a problem, that in-person classrooms provide significant benefits, and defends his ban on laptops in his classroom. *Describe these views and give alternative views, referring to changes in technology that have raised the issue for discussion.*

6c

1. The article, "Keep your medium in mind" (July, 2011) describes differences between how people consume online video and television, quotes an observation by Marshall McLuhan, and critiques the White House's management of the President's video image. *Discuss these aspects of the article and describe effects on our culture of changes in IT.*
2. The article, "Digital flirting: Easy to do, and easy to get caught" (June, 2011), describes ways use of technology enables flirting with strangers and ways it increases the chance of disclosure of this behavior. *Describe these two effects and their technological origins. Can you predict the future of flirting with strangers?*

Study questions on topic 7: Risks, control, and evaluation of IT

Multiple choice

1. Humans and IT

1. Computers are distinguished from other new technologies in that (a) their software is built from mass-produced components; (b) the pace of change is slow; (c) they are expensive; (d) computers make decisions; (e) none of these
2. The “digital divide” refers to the fact that (a) some people lack access to IT; (b) IT divides countries; (c) the Internet is fragmented; (d) some people misuse the Internet; (e) computers perform arithmetic operations well
3. Universal access to the Internet is seen by some as a (a) liberty; (b) claim right; (c) utopian idea; (d) present reality; (e) violation of the right to be different
4. In “democratic journalism,” (a) one party publishes all newspapers; (b) all news is Internet based; (c) news stories are voted on by readers; (d) all news is considered equal; (e) all readers are writers
5. In considering advantages and disadvantages of use of information technology, the textbook’s approach is to encourage attention to (a) advantages; (b) disadvantages; (c) small risks; (d) trade-offs; (e) none of these
6. Software is unusual in that it is built largely (a) domestically; (b) abroad; (c) from custom components; (d) by geniuses; (e) without planning
7. The fact that some people lack access to information technology raises the issue of (a) the “digital divide”; (b) digital starvation; (c) illiteracy; (d) low market demand; (e) none of these
8. A special feature of computers that raises risks is that they (a) perform numeric operations; (b) perform operations with words; (c) are becoming faster; (d) make decisions; (e) none of these
9. A special feature of computers that raises risks is that they (a) perform numeric operations; (b) perform operations with words; (c) are becoming faster; (d) run software built from custom components; (e) none of these
10. A special feature of computers that raises risks is that they (a) perform numeric operations; (b) perform operations with words; (c) are becoming faster; (d) change rapidly; (e) none of these
11. The “digital divide” refers to (a) a computation; (b) a category of people who lack access to IT; (c) a cultural separation between IT professionals and others; (d) the competition between Apple and Microsoft; (e) none of these

12. A factor that is said to increase risks is (a) human judgment is inferior to computer-generated results; (b) temptation to rely excessively on computer-generated results; (c) software results are no better than the knowledge of the software engineers that built it; (d) more data means lower-quality data; (e) humans can only handle so much information
13. Lack of access to IT is known as the (a) lost generation; (b) exclusion problem; (c) digital divide; (d) universal access problem; (e) none of these
14. A model (a) generates complexity; (b) analyzes; (c) simplifies; (d) synthesizes; (e) none of these
15. A ___ simplifies by removing inessentials and is based on assumptions (a) design; (b) model; (c) program; (d) web site; (e) none of these
16. The inherent value of a model is limited by (a) the skill of whoever uses it; (b) the state of the marketplace; (c) the credentials of whoever creates it; (d) the accuracy of data used to create the model; (e) none of these

2. System and software failure

1. Reference materials created by volunteer wiki methods raise the issue of (a) unemployment; (b) banning wiki sources; (c) the need to exercise judgment about sources; (d) excessive quantities of reference materials; (e) Internet addiction
2. A significant factor in system failure is (a) hardware unreliability; (b) small errors may have huge effects; (c) major errors are frequent; (d) operator errors; (e) many systems are never tested at all
3. A significant factor in system failure is (a) hardware unreliability; (b) upgrades introduce risk; (c) major errors are frequent; (d) operator errors; (e) many systems are never tested at all
4. A significant factor in system failure is (a) hardware unreliability; (b) weak error detection policies; (c) major errors are frequent; (d) operator errors; (e) many systems are never tested at all
5. Electronic voting systems are said to be subject to the risk of (a) court interference; (b) easy hacking; (c) insufficient testing; (d) bribes; (e) hardware unreliability
6. Electronic voting systems are said to be subject to the risk of (a) court interference; (b) easy hacking; (c) secrecy of proprietary software; (d) bribes; (e) hardware unreliability
7. Many IT projects have been abandoned due to (a) unreasonable requirements; (b) poor and changing requirements; (c) lack of knowledge of programming languages; (d) low processor speed; (e) unavailability of sufficient storage
8. System developers’ responsibilities (a) include good testing practices; (b) include meeting all requirements precisely; (c) end upon shipping a product; (d) include correcting all faults at no cost; (e) none of these

9. Well-designed systems (a) have been tested for all possible inputs; (b) include redundancy and self checking; (c) do not require further testing; (d) do not exist yet; (e) none of these

3. Ethics of IT professionals

1. Ethical responsibilities of IT professionals include (a) concern for persons other than clients; (b) minimizing cost; (c) maximizing profit; (d) minimizing testing; (e) maximizing testing
2. Ethical responsibilities of IT professionals include (a) safety; (b) minimizing cost; (c) maximizing profit; (d) minimizing testing; (e) maximizing testing
3. Ethical responsibilities of IT professionals include (a) honesty; (b) minimizing cost; (c) maximizing profit; (d) minimizing testing; (e) maximizing testing
4. Ethical responsibilities of IT professionals include (a) privacy; (b) minimizing cost; (c) maximizing profit; (d) minimizing testing; (e) maximizing testing
5. Ethical responsibilities of IT professionals include (a) limiting risks; (b) minimizing cost; (c) maximizing profit; (d) minimizing testing; (e) maximizing testing
6. IT professionals have responsibilities to (a) clients only; (b) employers only; (c) coworkers only; (d) clients, employers, coworkers, and others; (e) clients and employers only
7. Considering safety of a particular IT system is an ethical concern of (a) the government; (b) supervisors of IT professionals only; (c) system developers and others; (d) the people affected; (e) none of these
8. Giving a customer a discount on service in exchange for endorsing a product raises concerns of (a) cost-benefit analysis; (b) business policy; (c) legality; (d) ethics; (e) none of these

4. Future prospects of IT

1. *Strong AI* is (a) the ability of a machine to defeat a human at chess; (b) the ability of a machine to defeat a human at Jeopardy; (c) the view that a computer may have intelligence; (d) the view that a computer may simulate intelligence; (e) none of these

Short and longer answer

7a

1. What are some risks related to IT and some ways to manage them?
2. Compare the alleged addictive roles of certain kinds of computer use with another form of addiction.
3. Does E commerce replace needed human to human contact?
4. Discuss some reasons for system failures.
5. What are some *social risks* related to IT?
6. The article by J. Carreyrou, "Surgical robot examined in injuries" (available in classroom) describes safety concerns about a medical technology. *Explain these concerns and place them in the context of the course material.*

7b

1. Give some ethical concerns that apply to IT professionals
2. To whom or to what do IT professionals have ethical responsibilities?
3. What are some of the main ethical guidelines for IT professionals discussed in class and in the readings?
4. Discuss the following IT scenarios from an ethical standpoint. What policy constraints would you recommend and why? **SPELL OUT MORE**
 - a. A clinic for families with problems with violence wants its staffers to have laptops for home visits – issue is client privacy protection via security steps
 - b. Designing an email system with targeted ads – issue is storage of customer data related to ads and responses to them
 - c. Implementing a system design where demographic data is missing from input – ethical issue is related to following system specs
 - d. Testing of a safety-critical central application under deadline pressures to ship – should delivery be delayed?
 - e. Copyright violations by installing more copies than licensed
 - f. Requests to sell confidential information
 - g. Conflict of interest – stakeholders should be informed
 - h. Kickbacks – recommendations are expected to be honest opinions, not paid for
 - i. Expert system for judicial sentencing

AI question

Study questions on topic 8: Network structures and the global economy

Multiple choice

1. The network enterprise

1. In the network enterprise, mass production _____ flexible production (a) is more important than; (b) is less important than; (c) is converted to; (d) replaces; (e) none of these
2. The network enterprise reflects a crisis of (a) hierarchical management; (b) horizontal structures; (c) interdepartmental work teams; (d) E business; (e) none of these
3. The network enterprise reflects the emergence of (a) vertical integration; (b) non-hierarchical management structures; (c) top-down management; (d) profit-driven management; (e) mass production
4. The network enterprise is (a) management-centric; (b) customer-satisfaction-driven; (c) more table than predecessors; (d) more hierarchical than predecessors; (e) none of these
5. IT in the network enterprise (a) increases the number of layers of management; (b) eliminates layers of management; (c) gives lower management less say; (d) restricts workers to local collaboration; (e) none of these
6. An organization is (a) any set of people interacting; (b) any system; (c) any set of people with common objectives; (d) any human-based system structured around specific goals; (e) none of these
7. Business systems have especially tended to be based on networks in (a) Eastern Europe; (b) Western Europe; (c) The Americas; (d) East Asia; (e) South Asia
8. According to materials used in this course, for the first time the basic unit of organization in the economy is not a class or a corporation but (a) IT; (b) governments; (c) nonprofits; (d) networks; (e) none of these
9. Network structures shift (a) profit rates; (b) power relationships; (c) the relative importance of profit; (d) cultural values; (e) governmental policies

2. Changes in space and time concepts

1. The networked society is said to feature a space of (a) time; (b) distance; (c) flows; (d) salesmanship; (e) emptiness
2. In the space of flows, a system becomes (a) fragmented; (b) smaller; (c) larger; (d) globally interconnected; (e) diffuse
3. Flows are (a) transactions; (b) decisions; (c) exchanges; (d) repeated interaction sequences; (e) none of these
4. The network society is said to change the experience of (a) being paid; (b) showing up for work; (c) time; (d) music; (e) none of these
5. A basic feature of any social structure is (a) email; (b) Facebook; (c) web browsing; (d) flows of messages or images; (e) none of these

3. Decentralized structures and processes

1. The informational economy introduces an era of (a) education; (b) interesting work; (c) centralization; (d) decentralization; (e) hierarchy
2. The need for middle managers may fall because IT enables (a) more information to go directly to workers; (b) a more hierarchical structure; (c) a more autocratic structure; (d) workers to hire and fire managers; (e) none of these
3. IT may enable management to become (a) obsolete; (b) bloated; (c) decentralized; (d) jobless; (e) none of these
4. The model of the mind as a set of flows of impulses among neurons is (a) hierarchical; (b) mechanical; (c) chemical; (d) decentralized; (e) centralized
5. The Internet is (a) hierarchical; (b) stable in content; (c) decentralized; (d) centralized; (e) none of these
6. An example of a decentralized structure is a (a) military unit; (b) hierarchy; (c) network; (d) patriarchal family; (e) none of these

Longer-answer study questions on Topic 8

8a

1. How have the sources used in this course accounted for the rise of the Internet? State and support your agreement or disagreement with these sources.
2. What are the social results and the IT factors in the “society of flows”?
3. How have Windows and HTML enabled globalization?

8b

1. Describe the *network enterprise* and relate to IT and globalization.
2. How have corporate organizational forms changed as a result of IT?
3. How has *Windows* helped enable globalization?
4. What are some *common IT standards* and how have they helped enable globalization?
5. Relate *offshoring* and *supply chaining* to IT and to globalization.
6. In what way is the world flat? Relate to course material.
7. How, according to our sources, do networks restructure society?
8. In what way is society built around flows and how are these flows changing today?
9. Explain how IT fosters decentralized structures in the economy and in society.
10. Explain the “new organizational logic” that we have discussed that results from the use of IT.
11. Are we in an era of decentralization?
12. Respond to the following assertion: With the rise of the global informational society, some hierarchical structures are tending to be replaced by networked structures.
13. Comment on the assertion that mass production is tending to change into mass customization and flexible production.

8c

1. “How will we react when chips implanted in our brains enhance our memory with gigabytes of data and a search engine? Will we no longer be human?” (Baase)
2. The article, “A fight to win the future: computers vs. humans” (February, 2001) reports that a demonstration of a chess-playing program “foretells profound sociological and economic changes” and raises the task of “rethinking what it means to be human.” *What was the demonstration and what changes are foretold? Do you agree with the predictions reported and the concerns about IT and the meaning of being human?*
3. The article by T. Friedman, “The World Is Flat,” the convergence of a flattened world, new business processes, and billions of new technology “players” is defining the course of this century. *What does flatness mean to Friedman, what technologies is he referring to, and how does he predict the 21st century will proceed? Do you agree? (8a, b, c)*
4. A 2010 article refers to how *MoveOn.org* and the Tea Party sprang up in decentralized ways. An October 2011 *Salon* article explains that the use of technologies by young people in Tunisia and Egypt inspired initiators of the Occupy Wall Street effort. A February, 2011, article, “Arabs are democracy’s new pioneers,” refers to a decade of movements around the world organized by “a horizontal network that has no single, central leader.” *What relation do these instances have to the notion of hierarchy? What technologies have enabled them? Do you predict an increase in this trend around the world and in the U.S? Why or why not?*

Multi-topic study questions

1. What technical developments in IT have raised social issues for public debate?
2. What are the social implications of IT that could affect you? Describe what technical and legal assurances you would like to be in place to protect your computer's security, your personal privacy, intellectual property that you create, and your right to share information with friends.
3. Apply some of the ideas in the lecture by Prof. D'Andrea to issues discussed under topics 2, 3, and 4.
4. Please briefly review your experience with the group work, giving advantages, disadvantages, and suggestions for improving how it is done.
5. Comment on the claim that the *global information infrastructure*, *globalization*, or *informationalism* are *value-neutral*. Define the relevant terms.
6. Refer to the case you are assigned.
 - a. Summarize the facts of the case, giving the social or legal issues and implications and the technical developments that give rise to the social issues.
 - b. Relate your case to the material in one or more of the eight topics of the course, defining the relevant terms, and referencing relevant theories of ethics, legal principles, and categories of rights.
 - c. Give your opinion on the issues involved, supporting your opinion with specific facts and reasoning.
 - d. Give actual or possible alternative opinions and refer to facts and logic supporting them.
 - e. In standard format, acknowledge sources you have used. (You are not required to do outside research for this quiz.)
7. Suppose you are a middle school or high school teacher presenting information technology in a social-studies course. You are to explain where IT came from and what its role in society is. Draw from both your own prior knowledge and what you are learning in this course, to put together a narrative of the concepts you would present in that learning unit. Note that your course is not to be taught at the college level.

Begin by writing your own individualized summary of what is important to you. "Individualized" means different from summaries that would come from the IT and Society instructor's or your classmates' summaries.
8. How have your perspectives on the course material changed as a result of
 - (a) group work,
 - (b) comments on your work from other students,
 - (c) comments from the instructor?
9. What ideas or passages in the textbook most engaged you or most changed the way you thought?
10. If you were to present a workshop on IT and Society for a high-school class, how would you organize it?
11. What surprised you in the process of
 - (a) doing the research paper?
 - (b) preparing and making presentations?
 - (c) preparing for class discussion?
12. How do you expect *future* changes in information technology to affect you and how will you ready yourself for them?
13. Two ethical theories were discussed in this course. Define them and apply them to current issues raised by changes in IT in two or three of the seven topic areas discussed in class.
14. Distinguish liberties from claim rights, giving examples related to IT in areas such as privacy, security, and intellectual property.
15. Discuss issues of security, privacy, intellectual property, and ethics related to changes in cell phone availability and use.
16. Is it an ethical obligation of hosts of social networking sites to prevent posting of malicious and false stories about people on members' sites? What recourse should there be and is now available? Should material at the sites be considered valid evidence in legal cases over defamation?
17. Discuss the impact of IT in higher education and in the work workplace, as regards privacy, intellectual property, free expression, and risks with IT. You are invited here to say what you think may be some future developments with use of technology at FSU, starting with current uses and discussing possible problems or issues that may arise from changes.
18. What new issues are raised in the areas of *privacy*, *security*, *freedom of expression*, and *intellectual property* by technical changes in the way information is generated, communicated, and processed in the information revolution? (3, 4, 5)
19. Explain what globalization is and how it has been supported by developments in information technology. Give reasons why IT may help the world be more hierarchical and why it may lead to decentralized structures.