

## Group-work, quiz, and exam questions

**Note:** For all questions that address controversial issues, acknowledge reasons on both sides when you argue a position.

**Acknowledgement:** Many of the questions below were suggested by reading Sara Baase's *A Gift of Fire* and other material read while preparing this course.

### Multi-topic

- For *each* topic, make a list of terms that seem important in the readings and slides, and find reasonable definitions of these terms. Cite sources of definition.
- 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.
- 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 63.135 instructor's or your classmates' summaries.

#### Short answer

#### Multiple choice

- (a) ; (b) ; (c) ; (d) ; (e)

### Introduction

- 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?
- IT is claimed by the textbook author and instructor to embody and shape (a) political theories; (b) social values; (c) consumerism; (d) isolation; (e) none of these
- 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
- We look at the Internet primarily as concerns (a) hardware; (b) software; (c) ideas; (d) people; (e) none of these
- The classroom setting is viewed here chiefly as a (a) listening place; (b) network; (c) hierarchy; (d) democracy; (e) none of these
- (a) ; (b) ; (c) ; (d) ; (e)
-

## Questions on topic 1: The information-technology revolution

1. Is limited access to some research materials on the Internet (in contrast to free library access) a problem? (Defend or refute.)
  2. Does the IT revolution favor communitarian views, liberalistic views, or a mixture?
  3. What are the main technical and integrity concerns raised in the controversy over electronic voting? (See handout, "Security of Electronic Voting is Condemned.") You may give your opinion and support it.
  4. What are some changes in hardware, systems software, and application software, that have been part of the IT revolution?
  5. What is meant by the universal interchangeability of information, and what enables it?
  6. What is the difference between an operating system and a system of networked computers?
  7. How did the appearance of spreadsheet software change the work lives of people in business careers?
  8. Distinguish database management software, spreadsheet software, and web browsers, from the standpoint of *groups* of users.
- In answering the following questions, give arguments for both "yes" and "no" answers and state your view:*
9. Is there an ethical obligation to obey a law just because it is a law?
  10. If an act is legal, is it therefore not unethical?
  11. Should there be a law against lying?
  12. Should the posting of web sites be a licensed activity?
  13. Would it be desirable for a school to demand that cell phones be turned in to the instructor at the start of class?
  14. Are dictionaries made of paper useful?
  15. Should business and government web sites be required by law to provide full access to disabled people? (Baase)
  16. How do cell phones change conditions of privacy? Security? What are some inconsiderate acts with cell phones? Crimes?
  17. What are benefits and risks of social-networking sites?
  18. Which of the following are problems resulting from digital information technology, and which pre-existed IT?
    - 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
  19. "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)

### Short answer

1. What were two unexpected uses of social-networking sites? (Baase)
2. What are two ways that free services on the Web are paid for? (Baase)
3. What are the two main theories of ethics?
4. What are the two main categories of *rights*? Give an example of one.
5. Which kind of theory of ethics would argue that it is wrong to drive a car on a different side of the road from the customary one?

### Multiple choice

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 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. Cybertechnology is equivalent to (a) the Internet; (b) information technology; (c) software; (d) hardware; (e) none of these
6. Ethics assumes (a) rationality; (b) emotionality; (c) random behavior; (d) evil intentions; (e) none of these
7. The notion of rules that apply to everyone is central to the \_\_\_\_\_ theory of ethics (a) utilitarian; (b) consequentialist; (c) Mill; (d) deontological; (e) none of these
8. 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
9. The notion of judging acts by their results is central to the \_\_\_\_\_ theory of ethics (a) utilitarian; (b) Kant; (c) Locke; (d) deontological; (e) none of these
10. Negative rights are (a) claim rights; (b) liberties; (c) obligations to provide resources; (d) considered unethical; (e) none of these
11. Positive rights are (a) claim rights; (b) liberties; (c) obligations not to prevent action; (d) universally accepted; (e) none of these
12. 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
13. 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
14. 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
15. 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
16. 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
17. The history of IT includes (a) steel mills; (b) coal mines; (c) census tabulation; (d) astronomy; (e) none of these
18. The first program was written (a) for a machine never built; (b) for a PC; (c) for the UNIVAC; (d) for a web site; (e) none of these
19. Prices of semiconductors have \_\_\_\_\_ since 1900 (a) risen; (b) fallen; (c) remained the same; (d) fluctuated wildly; (e) none of these
20. Computer technology is based on (a) resistors; (b) capacitors; (c) transistors; (d) relays; (e) none of these
21. The Internet originated to address \_\_\_\_\_ problems (a) military; (b) sports; (c) business; (d) revenue; (e) none of these
22. The Internet originated in (a) the 19<sup>th</sup> century; (b) the 40s or 50s; (c) the 60s; (d) the 70s; (e) the 80s
23. 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
24. Network communication is characterized by (a) limited scope; (b) easy identification of all communicators; (c) reproducibility; (d) only one-to-one interaction; (e) none of these
25. A new feature introduced by “Web. 2.0” is (a) hyperlinking; (b) social networking; (c) downloading; (d) E business; (e) none of these
26. A new feature introduced by “Web. 2.0” is (a) hyperlinking; (b) wikis; (c) downloading; (d) E business; (e) none of these
27. A new feature introduced by “Web. 2.0” is (a) hyperlinking; (b) video sharing; (c) downloading; (d) E business; (e) none of these
28. (a) ; (b) ; (c) ; (d) ; (e)

## Questions on topic 2: Privacy and security

1. Is there a natural human right to privacy? (Defend or refute.)
2. What new privacy issues are raised by the information revolution?
3. Which aspects of the information revolution raise new privacy issues for discussion?
4. Is it wrong to take a picture with a cell phone without asking permission?
5. Is it wrong to post a picture on a web site without permission if the picture was taken with permission?
6. Baase, p. 40, #1.25 (video cam after political debate)
7. #1.26 (creating fictional person on social networking site)
8. p. 133, #2.41 (privacy policy of a large site)
9. What do you think the Fourth Amendment means by “papers and effects” as applied in 2008? What does “seizure” mean?
10. How do modern surveillance tools change the meaning of “reasonable expectation of privacy”?
11. Does a bank own, or have the obligation to share with law enforcement, our account records? Share with other businesses?
12. Give an example of how technology can turn surveillance into search.
13. Does curfew enforcement on young people justify use of video surveillance?
14. Give pros and cons of CCTV surveillance, citing cases on either side.
15. 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.
16. 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?
17. 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?
18. What issues are raised by RFID tags on products?
19. What issues are raised by the IRS’s loss of 2,000 computer in a four-year period?
20. Are young people less concerned about privacy than thirty years ago? Discuss.
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?
23. Give reasons for restricting prepaid cell phone service and for keeping it unrestricted.
24. Give reasons for and against allowing use of digital cash.
25. Is “freedom from the inappropriate judgement of others” a good definition of privacy? (Baase)
26. Does Google Street View violate privacy?

### **Short answer**

1. What does the Fourth Amendment say that law enforcement needs to have in order to search or seize property?

### **Multiple choice**

1. 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
2. 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
3. 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
7. 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
8. 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
9. The Fourth Amendment (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
10. The obligations of friendship are guaranteed by  
(a) legislation; (b) business policy; (c) personal decisions; (d) all of these; (e) none of these
11. (a) ; (b) ; (c) ; (d) ; (e)

### Questions on topic 3: Freedom of expression

1. Does cyberspace have unique features that justify different speech protections for sexual material? (Spinello, Tavani, p. 119)
  2. Does the opportunity to broadcast negative messages to a large Internet audience preclude strong legal protection from defamation? (S&T)
  3. Should simulated child pornography receive First Amendment protection? (S&T)
  4. 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?
- Multiple choice**
1. The first amendment to the U.S. constitution constrains (a) individuals; (b) businesses; (c) the government; (d) political parties; (e) none of these
  2. The First Amendment encodes a (a) positive right; (b) negative right; (c) notion of privacy; (d) notion of property; (e) none of these
  3. 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
  4. The democratic aspect of the global information infrastructure derives from (a) processor speed; (b) memory; (c) communications technology; (d) a global democratization of political institutions; (e) none of these
  5. The 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
  6. 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
  7. 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
  8. 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 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
  9. Content-blocking software is considered (a) foolproof; (b) reliable; (c) useful for detecting sexual images; (d) unreliable; (e) none of these
  10. This liable for defamation may include (a) ISPs; (b) readers of defamatory information; (c) owners of computers used; (d) publishers of defamatory information; (e) passive onlookers
  11. 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
  12. Spam (a) is considered 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
  13. 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
  14. 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
  15. 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
  16. (a) ; (b) ; (c) ; (d) ; (e)
  17. (a) ; (b) ; (c) ; (d) ; (e)

## Questions on topic 4: Intellectual property and IT

1. How are movies on the web different from journals on the web w.r.t. intellectual property?
  2. Should plagiarism be criminalized? (Defend or refute.)
  3. Should unauthorized software copying be criminalized? (Defend or refute.)
  4. Should copying to avoid charges of plagiarism be considered fair use? (Defend or refute.)
  5. Is copyright a matter of policy (choices of preferred outcomes) or ethics (S. Warwick) (Defend or refute.)
  6. Why should one person have exclusive rights over something that everyone could possess and use at once? (Hettinger)
  7. Are rights of attribution (author recognition) and integrity (non-alteration) more important than other intellectual property rights?
  8. Should electronic publishing have more, less, or the same copyright support as print publishing?
  9. Should author gain more rights to authorize republication of work? (Defend or refute.)
  10. Apply the safe-harbor concept to suggest a solution to the Napster case.
  11. Should prevention of crimes or copyright infringement have priority over freedom to develop new products, anonymously express ideas, or encrypt communications?
  12. Which instances of posting videos on YouTube are cases of fair use and which are not?
- Multiple choice**
1. Software and electronic data are (a) sold, so that the customer has full decision power over the product (a) licensed, so that the customer agrees to restrictions on use; (b) always available for unrestricted legal copying; (c) always copyrighted by the distributor; (d) all of the above; (e) none of the above
  2. The social purpose of awarding 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
  3. 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
  4. Copyright (a) dates to the 18<sup>th</sup> 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
  5. 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
  6. Intellectual property rights derive in part from (a) divine sanction; (b) royal decree; (c) labor invested in creation; (d) public approval; (e) none of these
  7. One limitation on intellectual property is (a) fair use; (b) universal acclaim; (c) reasonable doubt; (d) due diligence; (e) none of these
  8. Copyright protects (a) ideas; (b) profits; (c) expression; (d) inexperience; (e) none of these
  9. Derivative works are regulated by (a) patent; (b) trademarks; (c) trade secrets; (d) copyright; (e) copy protection
  10. 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
  11. Copying a video for later viewing is (a) a felony; (b) a misdemeanor; (c) a civil offense; (d) fair use; (e) net neutral
  12. 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
  13. 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
  14. Electronic publishing (a) reduces costs; (b) increases financial risks; (c) increases costs;

- (d) resolves intellectual-property issues; (e) is illegal
15. Software patents could be valid if software is viewed as (a) writing; (b) art; (c) invention; (d) ideas; (e) none of these
16. 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
17. 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
18. The music industry has faced significant difficulty with (a) central free-music services; (b) peer-to-peer file sharing; (c) music sent as email; (d) the Congress; (e) none of these
19. 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
20. Devices that circumvent copy protection (a) are subject to lawsuit; (b) are widely available; (c) are industry sanctioned; (d) are built into play-record devices; (e) none of these
21. 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
22. Recording a copyrighted film in a theater is (a) done by YouTube; (b) a civil offense; (c) a criminal offense; (d) considered a friendly act; (e) none of these
23. Safe harbor is associated with (a) takedown notices about copyrighted material; (b) software piracy; (c) patenting software; (d) criminal profiteering; (e) none of these
24. (a) ; (b) ; (c) ; (d) ; (e)
25. (a) ; (b) ; (c) ; (d) ; (e)
26. (a) ; (b) ; (c) ; (d) ; (e)

## Questions on topic 5: Work and education

### ***Multiple choice***

1. (a) ; (b) ; (c) ; (d) ; (e)
2. (a) ; (b) ; (c) ; (d) ; (e)
3. (a) ; (b) ; (c) ; (d) ; (e)
4. (a) ; (b) ; (c) ; (d) ; (e)
5. (a) ; (b) ; (c) ; (d) ; (e)
6. (a) ; (b) ; (c) ; (d) ; (e)
7. (a) ; (b) ; (c) ; (d) ; (e)
8. (a) ; (b) ; (c) ; (d) ; (e)
9. (a) ; (b) ; (c) ; (d) ; (e)
10. (a) ; (b) ; (c) ; (d) ; (e)
11. (a) ; (b) ; (c) ; (d) ; (e)
12. (a) ; (b) ; (c) ; (d) ; (e)
13. (a) ; (b) ; (c) ; (d) ; (e)
14. (a) ; (b) ; (c) ; (d) ; (e)
15. (a) ; (b) ; (c) ; (d) ; (e)

## Questions on topic 6: Risks, control, and evaluation of IT

### **Multiple choice**

1. (a) ; (b) ; (c) ; (d) ; (e)
2. (a) ; (b) ; (c) ; (d) ; (e)
3. (a) ; (b) ; (c) ; (d) ; (e)
4. (a) ; (b) ; (c) ; (d) ; (e)
5. (a) ; (b) ; (c) ; (d) ; (e)
6. (a) ; (b) ; (c) ; (d) ; (e)
7. (a) ; (b) ; (c) ; (d) ; (e)
8. (a) ; (b) ; (c) ; (d) ; (e)
9. (a) ; (b) ; (c) ; (d) ; (e)
10. (a) ; (b) ; (c) ; (d) ; (e)
11. (a) ; (b) ; (c) ; (d) ; (e)
12. (a) ; (b) ; (c) ; (d) ; (e)
16. (a) ; (b) ; (c) ; (d) ; (e)
17. (a) ; (b) ; (c) ; (d) ; (e)
18. (a) ; (b) ; (c) ; (d) ; (e)
19. (a) ; (b) ; (c) ; (d) ; (e)
20. (a) ; (b) ; (c) ; (d) ; (e)
21. (a) ; (b) ; (c) ; (d) ; (e)
- 13.

## Questions on topic 7: Ethics of IT professionals

### ***Multiple choice***

1. (a) ; (b) ; (c) ; (d) ; (e)
2. (a) ; (b) ; (c) ; (d) ; (e)
3. (a) ; (b) ; (c) ; (d) ; (e)
4. (a) ; (b) ; (c) ; (d) ; (e)
5. (a) ; (b) ; (c) ; (d) ; (e)
6. (a) ; (b) ; (c) ; (d) ; (e)
7. (a) ; (b) ; (c) ; (d) ; (e)
8. (a) ; (b) ; (c) ; (d) ; (e)
9. (a) ; (b) ; (c) ; (d) ; (e)
10. (a) ; (b) ; (c) ; (d) ; (e)
11. (a) ; (b) ; (c) ; (d) ; (e)
- 12.

## Questions on topic 8: The information economy and globalization; centralized and decentralized structures

### ***Multiple choice***

1. (a) ; (b) ; (c) ; (d) ; (e)
2. (a) ; (b) ; (c) ; (d) ; (e)
3. (a) ; (b) ; (c) ; (d) ; (e)
4. (a) ; (b) ; (c) ; (d) ; (e)
5. (a) ; (b) ; (c) ; (d) ; (e)
6. (a) ; (b) ; (c) ; (d) ; (e)
7. (a) ; (b) ; (c) ; (d) ; (e)
8. (a) ; (b) ; (c) ; (d) ; (e)
9. (a) ; (b) ; (c) ; (d) ; (e)
10. (a) ; (b) ; (c) ; (d) ; (e)
11. (a) ; (b) ; (c) ; (d) ; (e)
- 12.