## **Multiple-choice Questions**

For each of the following questions, choose the letter of the one *best* response.

## Chapter 1

- 1. The two principal catalysts for the Information Age have been
  - a) books and pamphlets.
  - b) computers and communication networks.
  - c) movie theaters and public parks.
  - d) newspapers and magazines.
  - e) radio and television.
- Which statement best supports the conclusion that society can control whether to adopt a new technology?
  - No new nuclear power plants were built in the United States for 25 years after the accident at Three Mile Island.
  - b) About half of all email messages are spam.
  - c) Despite decades of research, fusion power is an elusive goal.
  - d) People do not have to listen to Rush Limbaugh if they do not want to.
  - e) Some new technologies are simply too expensive to even consider adopting.
- 3. Tablets, abacuses, and manual tables
  - a) are no longer used, because of the proliferation of calculators and computers.
  - b) are examples of aids to manual calculating.
  - c) were developed in Western Europe in the late Middle Ages.
  - d) replaced Hindu-Arabic numerals as the preferred way to do calculations.
  - e) All of the above.
- 4. The mechanical adding machines of Pascal and Leibniz were not widely adopted because
  - a) they were too expensive.
  - b) there were unreliable.
  - c) they were too difficult to program.
  - d) they could not handle fractions.
  - e) bookkeepers successfully lobbied the King, and he made the machines illegal.
- 5. The calculating machine of Georg and Edvard Sheutz
  - a) computed the values of polynomial functions.
  - b) typeset the results of its computations.
  - c) performed calculations faster than they could be done manually.
  - d) performed calculations more reliably than they could be done manually.
  - e) All of the above.
- 6. Which of the following phrases does **not** describe the Gilded Age in America?
  - a) rapid industrialization
  - b) economic expansion
  - c) widespread electrification
  - d) concentration of corporate power
  - e) corporate mergers

- 7. Which of the following was **not** a result of the adoption of mechanical calculators?
  - a) Less demand for "superstars" who could rapidly compute sums by hand
  - b) Higher productivity of bookkeepers
  - c) Higher salaries of bookkeepers
  - d) Proliferation of companies making calculators
  - e) Feminization of bookkeeping
- 8. Which of the following was **not** a feature of cash registers in the early 1900s?
  - a) Ability to compute total of purchases
  - b) Ability to print itemized receipts for customers
  - c) Ability to print log of transactions for owners
  - d) Ability to compute amount of change to give customer
  - e) Ability to ring a bell every time cash drawer is opened
- 9. Punched card tabulation was invented by Herman Hollerith, an employee of
  - a) the Pennsylvania Railroad.
  - b) the Census Bureau.
  - c) the Pennsylvania Steel Company.
  - d) the Burroughs Adding Machine Company.
  - e) IBM.
- 10. Which of the following phrases best describes a system that inputs data, performs one or more calculations, and produces output data?
  - a) manual calculator
  - b) digital computer
  - c) data-processing system
  - d) difference engine
  - e) cash register
- 11. The first commercial electronic digital computers were produced just after
  - a) the Spanish-American War.
  - b) World War I.
  - c) World War II.
  - d) the Korean War.
  - e) the Vietnam War.
- 12. Programming languages were developed in order to
  - a) make it possible to program computers in English.
  - b) make programming faster and less error-prone.
  - c) speed translations between English and Russian during the Cold War.
  - d) improve the computation speed of computers, which were very expensive.
  - e) All of the above.
- 13. Which of the following was not an early programming language?
  - a) BASIC
  - b) COBOL
  - c) DATA-FLOW
  - d) FLOW-MATIC
  - e) FORTRAN

- 14. Software that allows multiple users to edit and run their programs simultaneously on the same computer is called
  - a) a data-processing system.
  - b) an intranet.
  - c) a microprocessor.
  - d) a programming language.
  - e) a time-sharing system..
- 15. A semiconductor device containing transistors, capacitors, and resistors is called
  - a) a computer.
  - b) a diode.
  - c) an integrated circuit.
  - d) a radio.
  - e) a transformer.
- 16. Which Cold War program played an important role in advancing integrated circuit technology?
  - a) B-52 bomber
  - b) Hydrogen bomb
  - c) Mark 37 torpedo
  - d) Minuteman II ballistic missile
  - e) NORAD radar network
- 17. Which company produced the System/360, a family of 19 compatible mainframe computers?
  - a) Fujitsu
  - b) Hewlett-Packard
  - c) IBM
  - d) Intel
  - e) Texas Instruments
- 18. The company that invented the microprocessor is
  - a) Fujitsu
  - b) Hewlett-Packard
  - c) IBM
  - d) Intel
  - e) Texas Instruments
- 19. Which of the following was **not** an activity of the People's Computer Company, a not-for-profit corporation in the San Francisco area?
  - a) Publishing a newspaper containing the source code to programs
  - b) Allowing people to rent time on a time-shared computer
  - c) Hosting Friday-evening game-playing sessions
  - d) Promoting a culture in which computer enthusiasts freely shared software
  - e) Developing the world's first graphical user interface
- 20. Who wrote "An Open Letter to Hobbyists," complaining about software theft?
  - a) Stewart Brand
  - b) Bob Frankston
  - c) Bill Gates
  - d) Steve Jobs
  - e) Steve Wozniak
- 21. A key application that first made personal computers more attractive to business was
  - a) the spreadsheet program.
  - b) the World Wide Web.
  - c) desktop publishing.
  - d) video editing.
  - e) email.