

Multiple-choice Questions

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

Chapter 1

- The two principal catalysts for the Information Age have been
 - books and pamphlets.
 - computers and communication networks.
 - movie theaters and public parks.
 - newspapers and magazines.
 - 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.
 - About half of all email messages are spam.
 - Despite decades of research, fusion power is an elusive goal.
 - People do not have to listen to Rush Limbaugh if they do not want to.
 - Some new technologies are simply too expensive to even consider adopting.
- Tablets, abacuses, and manual tables
 - are no longer used, because of the proliferation of calculators and computers.
 - are examples of aids to manual calculating.
 - were developed in Western Europe in the late Middle Ages.
 - replaced Hindu-Arabic numerals as the preferred way to do calculations.
 - All of the above.
- The mechanical adding machines of Pascal and Leibniz were not widely adopted because
 - they were too expensive.
 - there were unreliable.
 - they were too difficult to program.
 - they could not handle fractions.
 - bookkeepers successfully lobbied the King, and he made the machines illegal.
- The calculating machine of Georg and Edvard Sheutz
 - computed the values of polynomial functions.
 - typeset the results of its computations.
 - performed calculations faster than they could be done manually.
 - performed calculations more reliably than they could be done manually.
 - All of the above.
- Which of the following phrases does **not** describe the Gilded Age in America?
 - rapid industrialization
 - economic expansion
 - widespread electrification
 - concentration of corporate power
 - 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 America and the Soviet Union 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) desktop publishing.
 - b) email.
 - c) the spreadsheet program.
 - d) the World Wide Web.
 - e) video editing.

22. The software company that provided IBM with the operating system for its PC was
- Apple.
 - Boeing.
 - Microsoft.
 - Novell.
 - Tandy.
23. The first electronic networking technology widely used in the United States was the
- Internet.
 - radio.
 - telegraph.
 - telephone.
 - television.
24. The Pony Express went out of business when
- the Mexican War ended in 1846.
 - the Civil War began in 1861.
 - the transcontinental telegraph was completed.
 - AT&T completed the national telephone network.
 - the radio was invented.
25. Alexander Graham Bell invented the harmonic or musical telegraph, which enabled
- more than one message to be sent over a single telegraph wire at the same time.
 - human speech to be sent over a telegraph wire.
 - music to be sent over a telegraph wire.
 - B and C
 - None of the above.
26. Nearly all early telephones were installed in businesses, because
- people were afraid that telephones were dangerous.
 - people thought that the government was using telephones as eavesdropping devices.
 - only men were allowed to use a telephone.
 - most homes did not have electricity.
 - leasing a telephone was expensive.
27. A typewriter that prints a message transmitted over a telegraph line is called a
- computer.
 - monitor.
 - teletype.
 - terminal.
 - transponder.
28. Guglielmo Marconi originally conceived of the radio as a way to
- transmit telegraph messages without wires.
 - transmit electricity without wires.
 - transmit votes in national elections.
 - transmit light without wires.
 - All of the above
29. The power of radio as a medium of mass communication was demonstrated in 1938 when Orson Welles put on a dramatization of
- War of the Worlds*.
 - Hamlet*.
 - Homer's *Odyssey*.
 - the assassination of Franklin Roosevelt.
 - 20,000 Leagues Under the Sea*.