Chapter 1   What is a Computer?

1) A computer is unique, compared to any other machine because of its ability to _____.
A) process complex math functions
B) change its programming
C) process large amounts of information simultaneously
D) use many different types of software
Answer: B
Diff: 2
Ref: Objective 1 Explain the functions of a computer

2) Which statement is NOT true about the computers of the early 19th century?
A) Jacquard invented punched cards for a loom.
B) Charles Babbage created the Analytical Engine.
C) The Analytical Engine was finally built in 1864.
D) The Analytical Engine is being built today.
Answer: C
Diff: 2
Ref: Objective 1 Explain the functions of a computer

3) Which statement is TRUE about Ada Lovelace?
A) The Ada computer language is named in her honor.
B) Ada Lovelace lived in the 1940's.
C) She wrote computer programs for the punched cards.
D) Lovelace thoroughly tested her computer programs when they created.
Answer: A
Diff: 3
Ref: Objective 1 Explain the functions of a computer

4) Alan Turing _____.
A) wrote a paper titled "On Computable Numbers" in 1900
B) is considered by many to be the greatest mathematician that ever lived
C) developed the Turing Test in 1950
D) created a machine to test math accuracy
Answer: C
Diff: 2
Ref: Objective 1 Explain the functions of a computer

5) The IPC (information processing cycle) includes how many steps?
A) 6
B) 4
C) 7
D) 5
Answer: B
Diff: 1
Ref: Objective 1 Explain the functions of a computer

6) Second generation computers used _____, while fourth generation computers used

_____.
A) vacuum tubes, microprocessors
B) transistors, microprocessors
C) transistors, integrated circuits
D) vacuum tubes, transistors
Answer: B
Diff: 2
Ref: Objective 2 Describe the evolution of computer hardware, and explain the importance of Moore's Law

7) Which law relates to the number of transistors that an integrated circuit can accommodate?
A) Turing's Law
B) Zuse' Law
C) Moore's Law
D) Babbage's Law
Answer: C
Diff: 1
Ref: Objective 2 Describe the evolution of computer hardware, and explain the importance of Moore's Law

8) _____ are odd-looking, black and white checkered scannable squares that contain product information, coupons, or website details.
A) QR codes
B) RC codes
C) TG codes
D) RW codes
Answer: A
Diff: 1
Ref: Objective 2 Describe the evolution of computer hardware, and explain the importance of Moore's Law

9) The _____ is a very complicated circuit, contains the CPU, and was invented in 1971.
A) IC chip
B) microprocessor
C) transistor
D) switch circuit
Answer: B
Diff: 2
Ref: Objective 2 Describe the evolution of computer hardware, and explain the importance of Moore's Law

10) The _____ is an early computer created in 1951, which was used to predict election results.
A) UNIVAC
B) ENIAC
C) Harvard
D) Z1
Answer: A
Diff: 1
Ref: Objective 2 Describe the evolution of computer hardware, and explain the importance of Moore's Law

11) Which statement is NOT accurate about vacuum tubes?
A) They are similar to light bulbs.
B) They seldom need to be replaced.
C) They generate a lot of heat when operating.
D) They were used in many electronic devices, including computers and televisions.
Answer: B
Diff: 3
Ref: Objective 2 Describe the evolution of computer hardware, and explain the importance of Moore's Law

12) Which statement is NOT true about binary codes?
A) Works in two different switching states, such as on or off.
B) Decimal numbers are represented as 0's and 1's.
C) Additional switching capability can be added.
D) Eight bits represents a byte and provides 200 possibilities.
Answer: D
Diff: 2
Ref: Objective 3 Describe how computers represent data using binary code

13) Bits are used to measure _____.
A) data transfer and Internet connection rates
B) storage capacity
C) the size of graphics files
D) the time users are connected to the Internet
Answer: A
Diff: 2
Ref: Objective 3 Describe how computers represent data using binary code

14) Today file sizes are much larger because _____.
A) computers are much smaller in size
B) computer users spend more time online
C) files, such as graphics and music demand and use more storage space
D) folders can hold more files now, compared to before
Answer: C
Diff: 3
Ref: Objective 3 Describe how computers represent data using binary code

15) The base 10 number system contains how many digits?
A) 10
B) 11
C) 12
D) 18
Answer: A
Diff: 1
Ref: Objective 3 Describe how computers represent data using binary code

16) ASCII was originally created with a 7-bit system using with 128 characters, but later was upgraded to a(n) _____.
A) 12-bit with 212 characters
B) 18-bit with 320 characters
C) 8-bit with 256 characters
D) 16-bit with 254 characters
Answer: C
Diff: 1
Ref: Objective 3 Describe how computers represent data using binary code

17) _____ offer the fastest, most powerful, and greatest capability for upgrade at the lowest cost.
A) Computer workstations
B) Desktop computers
C) Netbook computers
D) All-in-one computers
Answer: B
Diff: 2
Ref: Objective 4 List the various types and characteristics of personal computers

18) Which of the following are features NOT built into a notebook computer?
A) Webcams
B) Wireless networking capabilities
C) Stylus
D) Displays for widescreen use
Answer: C
Diff: 2
Ref: Objective 4 List the various types and characteristics of personal computers

19) The smallest, most lightweight, and inexpensive computer is the
A) Netbook.
B) Nook.
C) Laptop.
D) PC.
Answer: A
Diff: 3
Ref: Objective 4 List the various types and characteristics of personal computers

20) The main difference between the Mac and the PC is _____.

A) hard drive disk space
B) the price
C) the speed of the microprocessor
D) the operating system
Answer: D
Diff: 2
Ref: Objective 4 List the various types and characteristics of personal computers

21) Which statement is NOT true about all-in-one computers?
A) They are small in size.
B) They may be difficult to upgrade.
C) They are popular in small business settings, like bank branches.
D) They require a separate monitor.
Answer: D
Diff: 2
Ref: Objective 4 List the various types and characteristics of personal computers

22) According to your text, a current growing trend shows that by 2015, _____.
A) netbooks will be more popular than desktops
B) notebooks will outsell desktops 2:1
C) desktops will outsell all other types of computers
D) Tablet PC's will outsell notebooks
Answer: B
Diff: 3
Ref: Objective 4 List the various types and characteristics of personal computers

23) Which is NOT considered a computer operating system?
A) OS X
B) Linux
C) Windows
D) Mac
Answer: D
Diff: 2
Ref: Objective 4 List the various types and characteristics of personal computers

24) In spite of the PC's popularity and widespread use, some people still prefer Mac over the PC because of _____.
A) Internet speed
B) hard disk space
C) greater capability for multimedia applications
D) a price less than a PC
Answer: C
Diff: 3
Ref: Objective 4 List the various types and characteristics of personal computers

25) Smartphones, tablets, GPS, and heart rate monitoring systems are all examples of _____.
A) navigation devices
B) mobile devices or handhelds

C) intelligence systems
D) computing and calculating devices
Answer: B
Diff: 2
Ref: Objective 5 Give examples of other personal computing devices

26) The GPS is a tracking system created by the U.S. Department of Defense and includes
_____ satellites.
A) 20
B) 36
C) 54
D) 24
Answer: D
Diff: 1
Ref: Objective 5 Give examples of other personal computing devices

27) Which is NOT considered a GPS application?
A) Finding directions
B) Clock/time synchronization
C) Making a map
D) Math calculations
Answer: D
Diff: 2
Ref: Objective 5 Give examples of other personal computing devices

28) Which gaming system does NOT require a controller in order to play?
A) Kinect for Xbox 360
B) PlayStation 3
C) Nintendo Wii
D) Atari
Answer: A
Diff: 1
Ref: Objective 5 Give examples of other personal computing devices

29) Which of the following is NOT an advantage of multiuser computers?
A) Central resources for all users
B) Security
C) Limited file storage
D) Allow many users to connect at one time
Answer: C
Diff: 2
Ref: Objective 6 List the various types and characteristics of multiuser computers

30) Dumb terminals _____.
A) have no way to connect to the Internet
B) have no processing ability
C) connect to microcomputers
D) must be supported by manual commands
Answer: B
Diff: 2
Ref: Objective 6 List the various types and characteristics of multiuser computers

31) Which statement is true about mainframes?
A) Mainframes connect to personal computers called clients.
B) Mainframes support around 200 computer users.
C) Enterprise servers have largely replaced mainframes.
D) Midrange servers drive mainframes.
Answer: C
Diff: 3
Ref: Objective 6 List the various types and characteristics of multiuser computers

32) _____ are very expensive, complex computer systems, specifically used in university and medical research applications and for forecasting the weather.
A) Supercomputers
B) Enterprise computers
C) Mini-computers
D) Mainframe computers
Answer: A
Diff: 1
Ref: Objective 6 List the various types and characteristics of multiuser computers

33) Which supercomputer conducts gene research?
A) NASA/Ames Research Center in U.S.A.
B) Riken Advanced Institute in Japan
C) Amazon Web Services in U.S.A.
D) Shanghai Supercomputer in China
Answer: D
Diff: 1
Ref: Objective 6 List the various types and characteristics of multiuser computers

34) Distributed computing refers to _____.
A) distributed power ability across all users
B) distributed disk storage for all computer users
C) distributed Internet usage across the entire network
D) distributes task processing across a group of computers
Answer: D
Diff: 2
Ref: Objective 6 List the various types and characteristics of multiuser computers

35) Ubiquitous computing is also called _____.
A) minicomputing
B) intelligent computing
C) invisible computing
D) embedded computing processes
Answer: C
Diff: 2
Ref: Objective 7 Explain the terms "ubiquitous computing" and "convergence"

36) Embedded computers _____.
A) make our lives easier because they are in everything, from street lights to dishwashers
B) are always noticed everywhere
C) contain a powerful processor with lots of file storage
D) would be easy to replace with something else
Answer: A
Diff: 3
Ref: Objective 7 Explain the terms "ubiquitous computing" and "convergence"

37) Smartphones use _____ technology, allowing users to perform several functions with one device.
A) convergence or integration
B) PIM Management
C) embedded design
D) invisible computing
Answer: A
Diff: 2
Ref: Objective 7 Explain the terms "ubiquitous computing" and "convergence"

38) Which statement is NOT true about green computing?
A) Green computing is earth-friendly.
B) Green computing is used in smart homes and appliances.
C) Green computing is cost-effective and helps the power plants in the long run.
D) Green computing is not a realistic choice for homeowners due to extra equipment that is needed to make it worthwhile.
Answer: D
Diff: 2
Ref: Objective 7 Explain the terms "ubiquitous computing" and "convergence"

39) Everyday tasks, such as turning on a light switch, bring us into contact with computers.
Answer: TRUE
Diff: 1
Ref: Objective 1 Explain the functions of a computer

40) Computers are unique, compared to other machines and through programming their function and purpose can change.
Answer: TRUE
Diff: 2
Ref: Objective 1 Explain the functions of a computer

41) Charles Babbage, an early mathematician, designed a computer that could be programmed using punched cards.
Answer: TRUE
Diff: 1
Ref: Objective 1 Explain the functions of a computer

42) The computer programs of Ada Lovelace could never be tested when they were created, and even today the programs she created would produce inaccurate mathematical results.
Answer: FALSE
Diff: 2
Ref: Objective 1 Explain the functions of a computer

43) The IPC (information processing cycle) consists of five stages, which are input, processing, retrieval, storage, and output.
Answer: FALSE
Diff: 1
Ref: Objective 1 Explain the functions of a computer

44) Computers of the first generation were very large in size and used vacuum tubes, which generated excess heat, but proved to be very dependable.
Answer: FALSE
Diff: 3
Ref: Objective 2 Describe the evolution of computer hardware, and explain the importance of Moore's Law

45) QR codes are essentially digital business cards, representing brands and companies.
Answer: TRUE
Diff: 2
Ref: Objective 2 Describe the evolution of computer hardware, and explain the importance of Moore's Law

46) Moore's law foresees that every three years the number of transistors that could be placed on an integrated chip would double.
Answer: FALSE
Diff: 1
Ref: Objective 2 Describe the evolution of computer hardware, and explain the importance of Moore's Law

47) Computers use a binary base 2 number system and binary codes to carry out commands.
Answer: TRUE
Diff: 2
Ref: Objective 3 Describe how computers represent data using binary code

48) Graphics or picture files today typically range in size from 1-5 KB.
Answer: FALSE
Diff: 2
Ref: Objective 3 Describe how computers represent data using binary code

49) Ergonomics is the study of workplace procedures and is related to computer workspaces, chair and desk design, and lighting function.
Answer: FALSE
Diff: 2
Ref: Objective 4 List the various types and characteristics of personal computers

50) Today, sales for desktop computers exceed that of laptop computers.
Answer: FALSE
Diff: 2
Ref: Objective 4 List the various types and characteristics of personal computers

51) The main difference between the Mac and the PC is the speed of the microprocessor.
Answer: FALSE
Diff: 2
Ref: Objective 4 List the various types and characteristics of personal computers

52) Mac computers are limited and can only operate with one operating system, OSX.
Answer: FALSE
Diff: 2
Ref: Objective 4 List the various types and characteristics of personal computers

53) A laptop is considered a mobile device because it is portable.
Answer: FALSE
Diff: 3
Ref: Objective 5 Give examples of other personal computing devices

54) GPS (Global Positioning System) was only for military purposes until 1980. In 1980, tracking through GPS was made available to all Internet users.
Answer: FALSE
Diff: 1
Ref: Objective 5 Give examples of other personal computing devices

55) Clients are actually considered personal computers that are connected to the server.
Answer: TRUE
Diff: 2
Ref: Objective 6 List the various types and characteristics of multiuser computers

56) Distributed computing uses grid or volunteer computing, allowing several computer users to

complete and track tasks.
Answer: TRUE
Diff: 2
Ref: Objective 6 List the various types and characteristics of multiuser computers

57) Supercomputers perform complex gaming tasks and can connect several gamers together.
Answer: FALSE
Diff: 2
Ref: Objective 6 List the various types and characteristics of multiuser computers

58) Servers provide access to multiple users and provide capabilities like email, printing, Internet, etc.
Answer: TRUE
Diff: 2
Ref: Objective 6 List the various types and characteristics of multiuser computers

59) Mainframes are small-sized servers that can provide 300 computer users with access to the Internet.
Answer: FALSE
Diff: 2
Ref: Objective 6 List the various types and characteristics of multiuser computers

60) Ubiquitous computing is used in smart homes and works in the background, hardly being noticed.
Answer: TRUE
Diff: 2
Ref: Objective 7 Explain the terms "ubiquitous computing" and "convergence"

61) Through convergence, many separate computerized devices have become one, allowing users to send emails, take pictures, play games, and surf the Internet.
Answer: TRUE
Diff: 2
Ref: Objective 7 Explain the terms "ubiquitous computing" and "convergence"

62) Embedded computers are found in everyday devices we use such as dishwashers, gasoline pumps, and grocery store cash registers.
Answer: TRUE
Diff: 2
Ref: Objective 7 Explain the terms "ubiquitous computing" and "convergence"

63) Computers can change their _____ and that makes them unique compared to any other machine.
Answer: programming
Diff: 1
Ref: Objective 1 Explain the functions of a computer

64) Alan Turing developed the Turing Test in _____.
Answer: 1950

Diff: 1
Ref: Objective 1 Explain the functions of a computer

65) During the _____ stage of the IPC, raw data is inserted into the system.
Answer: input
Diff: 2
Ref: Objective 1 Explain the functions of a computer

66) It has taken _____ years for computers to progress from first generation to fourth generation.
Answer: 40
Diff: 2
Ref: Objective 1 Explain the functions of a computer

67) Gordon Moore was the co-founder of the company _____.
Answer: Intel
Diff: 2
Ref: Objective 2 Describe the evolution of computer hardware, and explain the importance of Moore's Law

68) Transistors led the way for creating _____ computers.
Answer: second generation
Diff: 2
Ref: Objective 2 Describe the evolution of computer hardware, and explain the importance of Moore's Law

69) Transistors replaced _____.
Answer: vacuum tubes
Diff: 2
Ref: Objective 2 Describe the evolution of computer hardware, and explain the importance of Moore's Law

70) Digital data, used by a computer is represented by a(n) _____.
Answer: binary code
Diff: 2
Ref: Objective 3 Describe how computers represent data using binary code

71) Extended sets were developed so _____ could be used for many other languages.
Answer: ASCII
Diff: 1
Ref: Objective 3 Describe how computers represent data using binary code

72) A MB (Megabyte) is equivalent to about _____ pages of text.
Answer: 500
Diff: 1
Ref: Objective 3 Describe how computers represent data using binary code

73) _____ is an operating system created by Microsoft.
Answer: Windows
Diff: 2
Ref: Objective 4 List the various types and characteristics of personal computers

74) _____ computers have an integrated monitor and are used when office space becomes an issue.
Answer: All-in-one
Diff: 2
Ref: Objective 4 List the various types and characteristics of personal computers

75) _____ are very common and are seen in coffee shops, college campuses, and homes due to their wireless networking capability.
Answer: Notebook computers
Diff: 2
Ref: Objective 4 List the various types and characteristics of personal computers

76) A(n) _____ may contain a special pen or stylus, allowing users to write directly on the screen.
Answer: tablet
Diff: 2
Ref: Objective 4 List the various types and characteristics of personal computers

77) Mobile devices, such as smartphones, made up _____ of all worldwide PC sales in 2011.
Answer: 60 percent
Diff: 1
Ref: Objective 5 Give examples of other personal computing devices

78) Heart monitors are computers that are worn on the body and known as _____.
Answer: wearables
Diff: 2
Ref: Objective 5 Give examples of other personal computing devices

79) Magnavox and Atari released _____ in the 1970's.
Answer: video games
Diff: 2
Ref: Objective 5 Give examples of other personal computing devices

80) _____ provide services like Internet, email, and printers to many computers simultaneously.
Answer: Servers
Diff: 2
Ref: Objective 6 List the various types and characteristics of multiuser computers

81) Large computers called _____ can accomplish millions of transactions daily.
Answer: mainframes
Diff: 1
Ref: Objective 6 List the various types and characteristics of multiuser computers

82) Invisible computing refers to computers that are hardly noticed and are called _____ for short.
Answer: ubicomp
Diff: 2
Ref: Objective 7 Explain the terms "ubiquitous computing" and "convergence"

83) Digital signage and Smarthomes are prime examples of _____.
Answer: ubiquitous computing
Diff: 2
Ref: Objective 7 Explain the terms "ubiquitous computing" and "convergence"

84) Dawn is using her smartphone to pay an electric bill from her desk at work. She is utilizing _____ technology.
Answer: convergence
Diff: 3
Ref: Objective 7 Explain the terms "ubiquitous computing" and "convergence"

Choose the item in column 2 that best matches each item in column 1.

A) Mac computers made by Apple
B) Used 18,000 vacuum tubes
C) Computers that take up less space
D) Has four steps or processes
E) Uses a stylus or digital pen on the screen
F) Wrote paper "On Computable Numbers."
G) Created the Analytical Engine
H) Predicted exponential computer growth
I) Zeros and ones-Base 2
J) Tiny electronic switches
K) Early manufacturers of video games
L) Smartphones and GPS devices
M) Portable personal computer
N) Modern handheld gaming equipment
O) Used by the fourth generation computers
P) One byte

85) Alan Turing
Diff: 1
Ref: Objective 1 Explain the functions of a computer

86) Eight Bits
Diff: 2
Ref: Objective 3 Describe how computers represent data using binary code

87) IPC
Diff: 1
Ref: Objective 1 Explain the functions of a computer

88) ENIAC
Diff: 2
Ref: Objective 2 Describe the evolution of computer hardware, and explain the importance of Moore's Law

89) Microprocessors
Diff: 1
Ref: Objective 2 Describe the evolution of computer hardware, and explain the importance of Moore's Law

90) Charles Babbage
Diff: 1
Ref: Objective 1 Explain the functions of a computer

91) Gordon Moore
Diff: 1
Ref: Objective 2 Describe the evolution of computer hardware, and explain the importance of Moore's Law

92) Transistors
Diff: 1
Ref: Objective 2 Describe the evolution of computer hardware, and explain the importance of Moore's Law

93) Binary System
Diff: 2
Ref: Objective 3 Describe how computers represent data using binary code

94) Notebook
Diff: 1
Ref: Objective 4 List the various types and characteristics of personal computers

95) Tablet
Diff: 1
Ref: Objective 4 List the various types and characteristics of personal computers

96) All-In-One Computers
Diff: 1
Ref: Objective 4 List the various types and characteristics of personal computers

97) Use OS X operating systems
Diff: 1
Ref: Objective 4 List the various types and characteristics of personal computers

98) Handhelds
Diff: 2
Ref: Objective 5 Give examples of other personal computing devices

99) Magnavox and Atari
Diff: 1
Ref: Objective 5 Give examples of other personal computing devices

100) Nintendo DsI, 3DS
Diff: 1
Ref: Objective 5 Give examples of other personal computing devices

Answers: 85) F 86) P 87) D 88) B 89) O 90) G 91) H 92) J 93) I 94) M 95) E 96) C 97) A 98) L 99) K 100) N