Test Bank for CMPTR 3rd Edition by Pinard
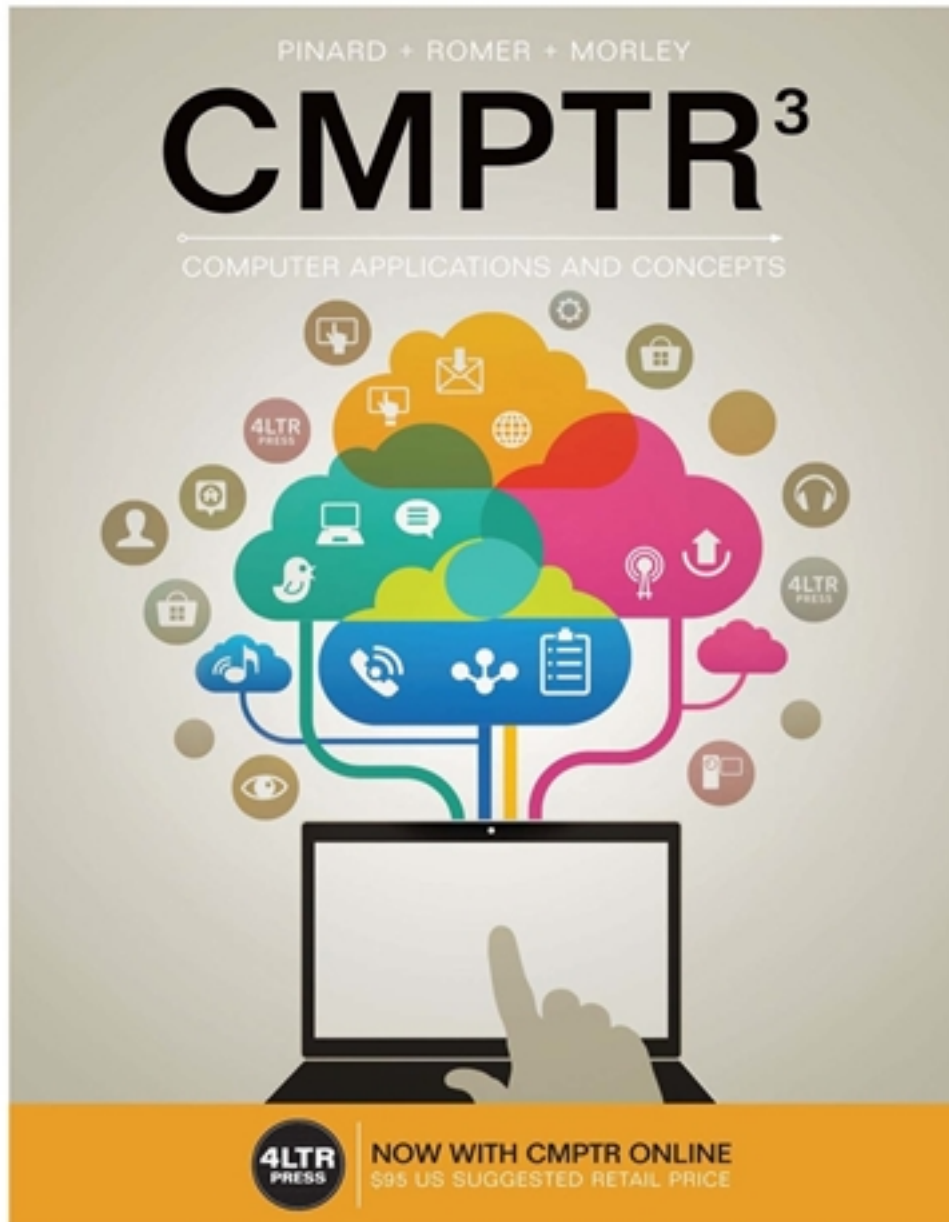
Test Bank

TRUE/FALSE

1 : A circuit board is a thin board containing computer chips and other electronic components.
A : true
B : false

Correct Answer : A

2 : Typically, external devices such as monitors, keyboards, mice, and printers connect to the motherboard by plugging into a port.
A : true
B : false

Correct Answer : A

3 : A port in a system unit of a computer is either built into the motherboard or created with an expansion card inserted into an expansion slot on the motherboard.
A : true
B : false

Correct Answer : A

4 : The random access memory (RAM) inside a computer delivers electricity to the computer via a power cord.
A : true
B : false

Correct Answer : B

5 : Portable computers contain rechargeable battery packs that can be charged via a power outlet.
A : true
B : false

Correct Answer : A

6 : Storage medium refers to the hardware where data is actually stored.
A : true
B : false

Correct Answer : A

7 : Smart cards can store personal identification data or funds.
A : true
B : false

Correct Answer : A

8 : A magnetic tape is a storage media consisting of plastic tape coated with a magnetizable substance.
A : true
B : false

Correct Answer : A

9 : Embedded flash memory is usually the primary storage for mobile devices, such as tablet and smartphones.
A : true
B : false

Correct Answer : A

10 : A keyboard is an input device used to move the on-screen pointer to enable the user to select and manipulate objects.
A : true
B : false

Correct Answer : B

11 : A flatbed scanner scans flat objects one page at a time.
A : true
B : false

Correct Answer : A

12 : A pincode is an optical code that represents data with bars of varying widths or heights.
A : true
B : false

Correct Answer : B

13 : Digital cameras can only take still photos.
A : true
B : false

Correct Answer : B

14 : Pico projectors typically create a display up to about 10 feet wide in order to easily share information stored on the device without everyone having to crowd around a tiny screen.
A : true
B : false

Correct Answer : A

MULTIPLE CHOICE

15 : ?All data processed by a computer must be in _____.
A : ?unitary form
B : ?binary form
C : ?hexadecimal form
D : ?duodecimal form

Correct Answer : B

16 : Which of the following statements is true of a bit?
A : ?Eight bytes grouped together are collectively referred to as a bit.
B : ?A named collection of files that is stored on computer hardware is known as a bit.
C : ?A bit is also known as a file.

D : ?A bit by itself typically represents only a fraction of a piece of data.

Correct Answer : D

17 : _____ bits grouped together are collectively referred to as a byte.
A : ?Nine
B : ?Twelve
C : ?Six
D : ?Eight

Correct Answer : D

18 : What is the value of 32 bits grouped together?
A : ?16 bytes
B : ?4 bytes
C : ?2 bytes
D : ?32 bytes

Correct Answer : B

19 : A _____ is a special connector accessible through the exterior of the system unit case that is used to connect an external hardware device.
A : ?port
B : ?motherboard
C : ?processor
D : ?chip

Correct Answer : A

20 : Which of the following refers to a measurement of the number of instructions that a CPU can process per second?
A : ?Run time
B : ?Clock speed
C : ?RAM capacity
D : ?Hard disk space

Correct Answer : B

21 : A computer _____ is the amount of data that a CPU can manipulate at one time.
A : ?memory
B : ?word
C : ?register
D : ?process

Correct Answer : B

22 : _____ is a special group of very fast memory circuitry, usually built into the CPU, that is used to speed up processing.
A : ?Flash memory
B : ?Read-only memory
C : ?Cache memory
D : ?Virtual memory

Correct Answer : C

23 : Identify a true statement about RAM (random access memory).
A : ?It is also known as ROM (Read Only Memory).
B : ?Data in RAM is erased when the computer is shut off.
C : ?It is nonvolatile.
D : ?Having less RAM allows more applications to run at one time in a computer.

Correct Answer : B

24 : A(n) _____ is high-speed memory built into the CPU that temporarily stores data during processing.
A : ?bus
B : ?interface card
C : ?expansion card
D : ?register

Correct Answer : D

25 : A computer's _____ is the sequence of instructions the computer follows as it is starting up.
A : ?PLA (programmable logic array)
B : ?BIOS (basic input/output system)
C : ?RAM (random access memory)
D : ?ROM (read-only memory)

Correct Answer : B

26 : The accompanying image shows a(n) _____ that is the hardware located in a system unit.

A : ?read-only memory (ROM)
B : ?expansion card
C : ?memory slot
D : ?drive bay

Correct Answer : B

27 : The hardware shown in the accompanying image is a(n) _____.

A : mini expansion slot?
B : ?macro USB adapter
C : ?mini expansion card
D : ?macro USB port

Correct Answer : C

28 : The hardware shown in the accompanying image is a(n) _____.

A : ?expansion slot
B : ?USB adapter
C : ?expansion card
D : ?USB port

Correct Answer : B

29 : The amount of data actually transferred under real-life conditions is called _____.
A : ?latency
B : ?throughput
C : ?jitter
D : ?bandwidth

Correct Answer : B

30 : The buses in a computer that connect peripheral (typically input and output) devices to the motherboard are often called _____.
A : ?power buses
B : ?backside buses
C : ?expansion buses

D : ?cache buses

Correct Answer : C

31 : Which of the following refers to the versatile bus architecture widely used for connecting peripheral devices?
A : ?Random Access Memory Bus
B : ?Register Bus
C : ?Cache Memory Bus
D : ?Universal Serial Bus

Correct Answer : D

32 : A _____ is a device made of semiconductor material that controls the flow of electrons inside a chip.
A : ?adapter
B : ?register
C : ?cache
D : ?transistor

Correct Answer : D

33 : The part of a CPU core that translates instructions into a form that can be processed by the arithmetic/logic unit (ALU) and floating point unit (FPU) is called the _____.
A : ?prefetch unit
B : ?decode unit
C : ?Universal Serial Bus
D : ?expansion bus

Correct Answer : B

34 : Kevin edits a digital photograph. If Kevin uses an image editing program for this purpose, the program will use the arithmetic/logic unit, with help from the _____ when needed, using only arithmetic and logical operations.
A : ?prefetch unit
B : ?decode unit
C : ?bus interface unit
D : ?floating point unit

Correct Answer : D

35 : The _____ allows the core of a computer to communicate with other CPU components, such as the memory controller and other cores.
A : ?prefetch unit
B : ?decode unit
C : ?bus interface unit
D : ?control unit

Correct Answer : C

36 : A _____ is used to synchronize all of a computer's operations.
A : ?bus port
B : ?ROM stick
C : ?system clock
D : ?RAM slot

Correct Answer : C

37 : Which of the following is the second step of the machine cycle of a computer?
A : ?The next instruction is fetched from cache or RAM.
B : ?The instructions are decoded.
C : ?The data or results are stored in registers or RAM.
D : ?The instructions are carried out.

Correct Answer : B

38 : Identify the third step of the machine cycle of a computer.
A : ?The next instruction is fetched from cache or RAM.
B : ?The instructions are decoded.
C : ?The data or results are stored in registers or RAM.
D : ?The instructions are carried out.

Correct Answer : D

39 : Which of the following is the fourth step of the machine cycle of a computer?
A : ?The next instruction is fetched from cache or RAM.
B : ?The instructions are decoded into a form the arithmetic/logic unit or the floating point unit can understand.
C : ?The data or results are stored in registers or RAM.
D : ?The instructions are carried out.

Correct Answer : C

40 : The accompanying figure shows a _____.

A : ?floppy disk
B : ?solid-state drive
C : ?magnetic drive
D : ?USB chip

Correct Answer : B

41 : The accompanying figure shows a(n) _____.

A : ?flash memory card
B : ?external optical drive
C : ?external stylus
D : ?USB disc

Correct Answer : B

42 : Which of the following statements is true of storage systems?
A : ?Solid-state drives generate more heat than magnetic hard drives.
B : ?To minimize disk access time, magnetic hard drives usually store related data on different cylinders of a magnetic hard drive.
C : ?The process of erasing data from a recordable or rewritable optical disc is called burning.
D : ?Magnetic media is less durable than optical discs.

Correct Answer : D

43 : The hardware in the accompanying image is a(n) _____.

A : ?stylus
B : ?optical disc
C : ?ultra bus card
D : ?network connector

Correct Answer : B

44 : In the accompanying image, the hardware that box "A" is pointing to is a type of _____.

A : ?USB flash drive

B : ?power supply

C : ?random access memory (RAM)

D : ?network port

Correct Answer : A

45 : Thomas asked his friend for a software suite. His friend had the software suite in his computer and he copied it into a small, rectangular storage medium and gave it to Thomas. Identify the storage medium in which Thomas's friend copied the software suite.

A : ?Optical disk

B : ?Flash memory card

C : ?Random access memory

D : ?Read only memory

Correct Answer : B

46 : Remote storage services accessed via the Internet are often referred to as _____.

A : ?flash storage

B : ?cloud storage

C : ?slot storage

D : ?optical storage

Correct Answer : B

47 : James shares the link of his Google Doc with his friend over e-mail. Here, James is using _____ to share information.

A : ?flash computing

B : ?stylus computing

C : ?cloud computing

D : ?pixel computing

Correct Answer : C

48 : Which of the following statements is true of storage systems?

A : ?In a magnetic hard drive, a cylinder is smaller in size than a sector.

B : ?Optical discs are less durable than magnetic media.

C : ?Cloud storage is also known as USB-drive storage.

D : ?Smart cards can store biometric data in the card.

Correct Answer : D

49 : _____ is a storage method that uses several hard drives working together.

A : ?Smart card

B : ?Logical volume card

C : ?Redundant array of independent disks (RAID)

D : ?Near Field Communications (NFC) disks

Correct Answer : C

50 : Brianna has developed a new device to be used by people with physical disabilities. Brianna's device can be classified as _____.
A : ?cloud hardware
B : ?assistive hardware
C : ?networking hardware
D : ?flash-drive hardware

Correct Answer : B

51 : In his supermarket, Davis uses a device that scans a collection of lines of varying widths on products and automatically feeds the data of the products into a computer. The device used by Davis is a _____.
A : ?cloud scanner
B : ?flatbed scanner
C : ?barcode reader
D : ?flash-drive reader

Correct Answer : C

52 : _____ are display devices that can be touched to provide input to the computer associated with them.
A : ?Touch mice
B : ?Touch pads
C : ?Touch screens
D : ?Touch styluses

Correct Answer : C

53 : The input device in the accompanying image is a _____.

A : ?stylus
B : ?touch pad
C : ?keypad
D : ?scanner

Correct Answer : B

54 : A _____ is an input device that reads an individual's fingerprint or voice.
A : ?RFID reader
B : ?barcode reader

C : ?biometric reader

D : ?card reader

Correct Answer : C

55 : A _____ is the smallest colorable area in an electronic image.

A : ?system unit

B : ?bit unit

C : ?pixel

D : ?file

Correct Answer : C

56 : David wants to display a few photos from his mobile phone onto a small, rectangular piece of wood that is located at 5 feet away from the mobile phone. David should use a _____ to display the photos.

A : ?DVD drive

B : ?pico projector

C : ?drum scanner

D : ?dot matrix printer

Correct Answer : B

57 : A(n)_____ is an impact printer.

A : ?dot-matrix printer

B : ?pico printer

C : ?laser printer

D : ?ink-jet printer

Correct Answer : A

58 : Case 2-1Mary has won a newly launched laptop computer in an event conducted by her school.She uses a pressure sensitive device that looks just like a pen to navigate the applications in her laptop. Identify the device Mary is using.

A : ?A tablet

B : ?A touch pad

C : ?A stylus

D : ?A projector

Correct Answer : C

59 : Case 2-1Mary has won a newly launched laptop computer in an event conducted by her school.Mary taps a part of her laptop to perform the actions of a mouse. What is the part of the laptop called?

A : ?A touch pad

B : ?A stylus

C : ?A tablet

D : ?A game pad

Correct Answer : A

60 : Case 2-2Victor, an accounts manager at a firm, has drafted the financial report for the financial year. He needs to submit the hard copy of this report to his firm next week.While printing the sheets using his printer, a piece of paper jammed the printer. When Victor tried pulling out the paper, his fingers got stained by a liquid used in the printer. Identify the printer Victor used.

A : ?Ink-jet printer
B : ?Laser printer
C : ?Thermal printer
D : ?Woodblock printer

Correct Answer : A

61 : ?Case 2-2Victor, an accounts manager at a firm, has drafted the financial report for the financial year. He needs to submit the hard copy of this report to his firm next week.Victor sent the report to his office printer for printing. While taking out the prints from the printer, his hands were stained by flakes of powdered ink from the toner. Identify the printer Victor used.
A : ?Ink-jet printer
B : ?Laser printer
C : ?Thermal printer
D : ?Impact printer

Correct Answer : B

FILL IN THE BLANK

62 : The _____ inside a computer delivers electricity to the computer via a power cord.A. power bankB. power supplyC. power adapterD. power filter

Correct Answer : power supply

63 : _____ are CPUs that contain the processing components or cores of several independent processors in a single CPU.A. Multi-core CPUsB. Single-core CPUsC. Thin component CPUsD. Thick component CPUs

Correct Answer : Multi-core CPUs

64 : The _____ is the section of a CPU core that performs addition, subtraction, multiplication, and division involving integers and compares two pieces of data to see if they are equal or determining if a specific condition is true or false.A. arithmetic/logic unitB. decimal point unitC. decode unitD. application processor unit

Correct Answer : arithmetic/logic unit

65 : In a computer, the _____ coordinates and operates the operations and activities taking place within a CPU core, such as retrieving data and instructions and passing them on to the arithmetic/logic unit for execution.A. bus interface unitB. control unitC. prefetch unitD. application processor unit

Correct Answer : control unit

66 : One or more adjacent sectors form a _____, the smallest amount of disk space that can be used to hold a file.A. pathB. cylinderC. clusterD. track

Correct Answer : cluster

67 : Hybrid hard drives (also called solid-state hybrid drives, or SSHDs) contain both flash memory chips and a(n) _____.A. magnetic hard driveB. optical hard driveC. quantum hard

driveD. digital hard drive

Correct Answer : magnetic hard drive

68 : _____ consists of high-performance storage systems that are connected individually to a network to provide storage for the computers connected to that network.A. File area network (FAN)B. Storage area network (SAN)C. Network attached storage (NAS)D. Fiber channel over Ethernet storage

Correct Answer : Network attached storage (NAS)

69 : _____ refers to using a storage device that is accessed through a local network.A. Network storageB. Network access pointC. Storage unitD. Local area storage

Correct Answer : Network storage

70 : Some mobile digital wallet transactions use _____ technology, a wireless technology used to facilitate transmission between devices.A. RAID (redundant array of independent disks)B. optical character recognition (OCR)C. Ethernet Hardware Address (EHA)D. Near Field Communications (NFC)

Correct Answer : Near Field Communications (NFC)

71 : A _____ is a penlike pointing device used to write electronically on a display screen.A. stylusB. trackpadC. joystickD. tablet

Correct Answer : stylus

72 : A(n) _____ is a touch-sensitive pointing device used with a fingertip or thumb to control the on-screen pointer or manipulate objects.A. touch padB. touch penC. touch boxD. touch controller

Correct Answer : touch pad

73 : _____ record images on a digital storage medium, such as a flash memory card, an embedded flash memory, or a built-in hard drive.A. Digital camerasB. Digital lockersC. Digital drivesD. Digital cards

Correct Answer : Digital cameras

74 : Projectors that are designed primarily to display movies and other audiovisual aids are called _____.A. multimedia projectorsB. audio projectorsC. star projectorsD. super projectors

Correct Answer : multimedia projectors

75 : _____ produce three-dimensional (3D) objects that can create a wide variety of objects, such as a 3D model of a new building, a prototype of a new product, custom medical and dental implants, and edible products printed from sugar or chocolate.A. 3D analyzersB. 3D scannersC. 3D printersD. 3D projectors

Correct Answer : 3D printers

ESSAY

76 : Discuss disk access time with its requirements.

Correct Answer : Answers will vary. The total time that it takes for a hard drive to read or write data is called the disk access time and requires the following:Seek time—The read/write heads move to the cylinder that contains (or will contain) the desired data.Rotational delay—The hard disks rotate into the proper position so that the read/write heads are located over the part of the cylinder to be used.Data movement time—The data moves, such as reading the data from the hard disk and transferring it to memory, or transferring the data from memory and storing it on the hard disk.A typical magnetic disk access time is around 8 milliseconds (ms). To minimize disk access time, magnetic hard drives usually store related data on the same cylinder. This strategy reduces seek time and, therefore, improves the overall access time. Because solid-state drives (SSDs) do not have to move any parts to store or retrieve data, they do not require seek time or rotational delay, and their access time is much faster than magnetic hard drives—essentially instantaneous at about 0.1 ms. Please see the section "Storage Systems" for more information.

77 : Describe cloud computing.

Correct Answer : Answers will vary. Remote storage services accessed via the Internet are often referred to as cloud storage or online storage. Cloud storage can be provided either as a stand-alone service or as part of a cloud computing service. For instance, most online applications, such as Google Docs, the Flickr photo-sharing service, and social networking sites like Facebook, provide online storage for these services. There are also sites whose primary objective is to allow users to store documents online, such as Dropbox, iCloud, Google Drive, and Microsoft OneDrive. Cloud storage sites allow users to share files with others. For security purposes, cloud storage sites are usually password protected and you can specify the individuals who are allowed to view shared files. Please see the section "Storage Systems" for more information.

78 : Brief speech recognition systems and digital cameras.

Correct Answer : Answers will vary. Speech recognition systems enable the device being used to recognize voice input as spoken words. It requires appropriate software in addition to a microphone. To enable hands-free operation, speech recognition capabilities are commonly built into cars for hands-free control of navigation systems and sound systems as well as to allow hands-free mobile phone calls to take place via the car's voice interface. Specialty speech recognition systems are frequently used to control machines, robots, and other electronic equipment, such as by surgeons during surgical procedures. They can also be used by individuals who cannot use a keyboard to input data and control the computer. Music input systems are used to input music into a computer, such as to create an original music composition or arrangement or to create a custom music CD. Existing music can be input into a computer via a music CD or a Web download.?Digital cameras record images on a digital storage medium, such as a flash memory card, an embedded flash memory, or a built-in hard drive.Digital cameras can take still photos or moving video images, or both. In addition to stand-alone digital cameras, digital cameras are integrated into many portablecomputers and mobile devices. The images taken with a digital camera can be sent toothers or posted on social media; they can also be transferred to a computer for editing, printing, or inclusion in a document as needed. Please see the section "Input Devices" for more information.