CHAPTER QUESTIONS:

Q1) State whether each of the following statements is **TRUE** or **FALSE**.

	Statement	TRUE / FALSE
[1]	Computers process information to create data.	F
[2]	Hardware consists of a series of instructions that tells the computer what actions to perform and how to perform them.	F
[3]	Because embedded computers are components in larger products, they usually are small and have limited hardware.	T
[4]	Data conveys meaning to users, and information is a collection of unprocessed items, which can include text, numbers, images, audio, and video.	F
[5]	Embedded computers generally are special purpose computers.	T

Q2) Choose the best answer:

1	LinkedIn is a:	A. Type of Computer B. A Software C. A Server D. Professional Network
2	_____ is/are the steps that tell the computer how to perform a particular task.	A. Data B. Information C. Instructions D. Documentation
3	Although not as powerful as a supercomputer, this type of computer is capable of great processing speeds and data storage.	A. Laptop B. Mainframe C. Supercomputer D. Desktop Computer
4	The circuitry of the computer is part of:	A. Software B. Hardware C. Data D. Firmware
5	A game console is a type of:	A. Embedded Computer B. Server C. Mobile Device D. Mainframe

CHAPTER QUESTIONS:

Q1) State whether each of the following statements is **TRUE** or **FALSE**.

	Statement	TRUE / FALSE
[1]	The keyboard, mouse, microphone, scanner, digital camera, and PC camera are six commonly used output devices.	F
[2]	During processing, the processor places instructions to be executed and data needed by these instructions into memory.	T
[3]	Storage differs from memory in that it holds items only temporarily while the processor interprets and executes them.	F
[4]	A storage medium is the physical material on which a computer keeps data, instructions, and information.	T
[5]	When a computer executes the instructions in a program, usually it first loads the instructions from memory into storage.	F
[6]	When a computer is started, the operating system loads onto the computer's hard disk from memory.	F
[7]	On a personal computer, the electronic components and most storage devices reside outside the system unit.	F
[8]	A hertz is one cycle per second.	T
[9]	A CPU with higher clock speed can process fewer instructions per second than a CPU with a lower clock speed.	F
[10]	The higher the clock speed, the faster the processor, and the more expensive the computer.	T
[11]	Nonvolatile memory loses its contents when power is removed from the computer.	F

Q2) Choose the best answer:

1	Computer hardware includes all of the following *except* _____.	a. input and output devices b. storage and communications devices c. a system unit d. application programs
2	Some computer components, such as the _____, are internal and reside inside the system unit.	a. keyboard and mouse b. monitor and microphone c. processor and memory d. printer and scanner
3	The CPU contains _____.	a. input devices and output devices b. the control unit and the arithmetic/logic unit c. main memory and storage devices d. all of the above
4	Arithmetic operations _____.	a. involve matching one data item to another to determine if the first item is greater than, equal to, or less than the other item b. include addition, subtraction, multiplication, and division c. sort data items according to standard, predefined criteria in ascending order or descending order d. use conditions with operators such as AND, OR, and NOT
5	The data stored on ROM chips _____ when power to the computer is turned off.	a. can be modified and is lost b. can be modified and is not lost c. cannot be modified and is lost d. cannot be modified and is not lost

Q3) An image is presented on a screen containing 360 pixels width, and 180 pixels height, answer the followings:

   A) What is the total pixels being displayed on the screen?

   B) If each pixel is represented as 8 bits,

   - What is the image size in KB?
   - What is the image size in MB?

A) Total Pixels = (pixels width) X (pixels height)

$$= 360 \ X \ 180$$

$$= 64800 \ \text{PIXELS}$$

B)   معطى بالسؤال   1 PIXEL = 8 BITS

$$8 \ \text{BITS} = 1 \ \text{BYTE} = 2^{-10} \ \text{KB}$$

Size (KB) = Total Pixels X Pixel Size (KB)

$$= 64800 \ X \ 2^{-10} \ \text{KB}$$

$$1 \ \text{KB} = 2^{-10} \ \text{MB}$$

Size (MB) = Size (KB)   X   KB (MB)

$$= 64800 \ X \ 2^{-10} \ X \ 2^{-10}$$

$$= 64800 \ X \ 2^{-20} \ \text{MB}$$

CHAPTER QUESTIONS:

Q1) State whether each of the following statements is **TRUE** or **FALSE**.

	Statement	TRUE / FALSE
[1]	A computer needs an operating system to work.	T
[2]	Command-line interfaces often are difficult to use because they require exact spelling, grammar, and punctuation.	T
[3]	Disk defragmentation increases data access efficiency (speed).	T
[4]	Smart devices usually have a special operating system.	T
[5]	Microsoft Office Word is an example of utility software.	F
[6]	A web browser (like Google Chrome) is an example of system software.	F
[7]	A device driver is a system software that enables the computer to identify some hardware.	T

Q2) Choose the best answer:

1	If a new device is attached to a computer, such as a printer or scanner, its _____ must be installed before the device can be used.	**A.** Buffer **B.** Pager **C.** Driver **D.** Server **E.** None of the choices
2	A(n) _____ shrinks the size of a file.	**A.** Disk defragmenter **B.** File compression utility **C.** Screen saver **D.** Uninstaller **E.** None of the choices
3	A _____ is a utility that reorganizes the files and unused space on a computer's hard disk so the operating system can access data more quickly and programs can run faster.	**A.** Disk scanner **B.** Disk defragmenter **C.** File viewer **D.** File compression utility **E.** None of the choices

CHAPTER QUESTIONS:

Q1) State whether each of the following statements is **TRUE** or **FALSE**.

	Statement	TRUE / FALSE
[1]	The Internet is the largest WAN in the world.	T
[2]	The type of cable used inside most homes for telephone service is twisted-pair wire.	T
[3]	HTTP is an internet protocol.	T
[4]	In the Bus topology, if the shared line failed the whole network will fail.	T
[5]	192.186.100.0 is an invalid IP address	F
[6]	Twisted pair cable is more expensive than fiber-optics cable.	F
[7]	The speed of the upstream is 8 times the speed of the downstream.	F
[8]	Switch is an intelligent device, since it can determine the destination of the data packets and forward them appropriately.	T
[9]	Coaxial Cable is made of four pairs plastic wires twisted together to send data.	F
[10]	Modem is a device that connects two or more networks together.	F

Q2) What is the device used in each of the following cases:

a. A device used to connect multiple devices on a wired network. __**Hub / Switch**__

b. A device that enables a computer to communicate over telephone lines. ___**Modem**___

c. A device used to connect wireless devices to a network. ___**Access Point**___

d. A device used to amplify signals on a network. ___**Repeater**___

CHAPTER QUESTIONS:

Q1) State whether each of the following statements is **TRUE** or **FALSE**.

	Statement	TRUE / FALSE
[1]	Unlike viruses and worms, Trojan horses cannot replicate themselves.	T
[2]	It is safe to check the box "keep me logged in" when using a public computer to check your email.	F
[3]	It is impossible to prevent websites from storing cookies on your computer.	F
[4]	A Ransomware is a malware program that secretly records and reports an individual's activities on the Internet.	F
[5]	It is a good practice to change your password frequently.	T
[6]	A cookie is a small text file that a client stores on a web server.	F
[7]	A computer virus can only be transferred to another computer via a storage medium.	F
[8]	Encryption guarantees altering the shape of information when sent over the network.	T