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Questions Assignment

**Chapter 1**

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Question 1) \_\_ **Integrated** **circuits** (**ICs**)\_\_\_ are monolithic blocks (chips) made of silicon and closely related elements in which both active parts like transistors and connective parts like wires are fabricated together in a multistep process.

Question 2) \_\_ **Agent** \_\_ is anything that can follow instructions.

TRUE or FALSE

\_\_**T**\_ Software “instructs” the computer hardware by providing the steps needed to perform a task, say to display a web page, or play a game.

\_\_**F**\_ The steady improvement of technological parts for computers is known as “The Law of Technology.”

MULTIPLE CHOICE

In computing, separating the relevant from the irrelevant, and being able to apply abstractions to other cases, are \_**both** **essential**\_\_.

1. Both essential
2. Not needed
3. Needed but only one at a time.
4. All of the Above
5. None of the above

\_\_**Software development**\_\_ applies a layered approach in which programs at one level apply code for the more primitive operations from lower levels and provide more advanced facilities for higher levels.

1. Software
2. Abstraction
3. Algorithm creation
4. Software development
5. None of the above

**Chapter 2**

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Question 1) Computers encode info as a sequence of binary digits, 0’s and 1’s and also known as \_\_ **Digital** **information** \_\_.

Question 2) \_ **Analog** \_\_\_ information comes from or is stored on a continuously variable medium.

TRUE OR FALSE

\_\_**F**\_\_ The placeholder technique is used to “hide” part of the text that should be tampered with when using F/RA.

\_\_**T**\_\_ The main reason for consistency across computer applications is that certain operations are fundamental to processing information no matter what the application.

MULTIPLE CHOICE

**\_Metaphor\_\_** is an icon, an image, or a concept used as a representative of or is symbolic of a computation.

1. Application
2. Place holder
3. Metaphor
4. Instance
5. None of the above

An \_**instance\_** is any specific piece of information of a particular type.

1. Metaphor
2. Analog
3. Type
4. Instance
5. None of the above

**Chapter 3**

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Question 1) Communication between two entities can be separated into two broad classes: \_**synchronous** and **asynchronous.**

Question 2) Most interactions over the Internet use a protocol known as **client/server interaction.**

TRUE OR FALSE

\_\_**F**\_ In a client/server structure, a key aspect of the idea is that two service request and responses are involved.

\_\_**F**\_ Because two packets can take different routes to one destination, networking engineers record the routes packets take using a tool called tracepath.

MULTIPLE CHOICE

\_**domain name system\_** is the hierarchical structure we use to name computers.

1. Domain name system
2. TCP/IP
3. Dynamic Host Configuration Protocol
4. Top level domain names
5. None of the above

What way reduces traffic and saves information for possible reuse soon?

1. Redundancy
2. **Caching**
3. Root name servers
4. Web servers
5. None of the above

**Chapter 4**

FILL IN THE BLANK

Question 1) \_\_**text editor\_** is a more basic way to process text than word processors such as Word and WordPerfect.

Question 2) To create a path that goes up into an enclosing folder use \_\_**dot-dot-slash(../)\_**

TRUE OR FALSE

\_\_**F**\_ A description list is usually made up of a sequence of description data.

**\_\_T\_** A productive way to work while using the compose and check process is to keep two windows open: your text editor and your browser for checking.

MULTIPLE CHOICE

\_**Tags\_** are words or abbreviations enclosed in angle brackets that come in pairs, the second with a slash.

1. Tag
2. Element
3. Anchor text
4. Hypertext reference
5. None of the above

The concept of HTML5 elements being treated as if in boxes is called \_\_**box model of CSS\_**

1. Abstraction
2. Algorithmic modeling
3. Box model of css
4. Html5 prime model
5. None of the above

**Chapter 5**

FILL IN THE BLANK

Question 1) The user presents tokens, that is, search terms, to the \_**query processor,** which looks them up in the index.

Question 2) **\_primary source\_** is a person who has direct knowledge of the information.

TRUE OR FALSE

\_\_**T**\_ Currency relates to how recently the information was updated.

\_\_**T** Many sites offer the opportunity to perform a site search which means looking only on their site.

MULTIPLE CHOICE

Are web posts **unmediated**, meaning that is there are limits what people post?

1. Unmediated
2. Mediated
3. Restricted
4. Open source
5. None of the above

The **index** is a list of tokens that are associated with the page.

1. Index
2. Queries
3. Crawler
4. Intersection
5. None of the above

**Chapter 6**

FILL IN THE BLANK

Question 1) **debugging** is a process used to figure out why an application or system does not work properly.

Question 2) Programmers begin with a **specification,** a precise description of the input, how the system should behave, what the output should be.

TRUE OR FALSE

\_\_**T**\_ In general, hardware failures can be resolves using techniques such as redundancy.

\_\_**F**\_ All states that the software can get into, known as static configurations, cannot be examined for their correctness.

MULTIPLE CHOICE

In general, hardware failures can be resolved using techniques such as \_**redundancy\_**.

1. Debugging
2. Compiling
3. Redundancy
4. Print queue
5. None of the above

What is the first step in debugging?

1. **Check that the error is reproducible**
2. Check all the “obvious” error sources
3. Isolate the problem by dividing the operation into parts
4. Step through the process from beginning to end
5. None of the above

**Chapter 7**

FILL IN THE BLANK

Question 1) Information describing information is called \_**metadata\_**.

Question 2) \_**parity\_** refers to the extra bits to the memory to help detect errors.

TRUE OR FALSE

\_\_**F**\_ To place information in order by using symbols is called ordering symbols.

\_\_**F**\_ The two earliest uses of the PandA representation were to encode digits.

MULTIPLE CHOICE

A different number of bytes is used depending on the character is known as what?

1. **Variable length**
2. Unicode
3. Binary digits
4. Byte code
5. None of the above

What is a synonym for a byte?

1. Nibble
2. **Octect**
3. Complement
4. All of the above
5. None of the above

**Chapter 8**

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Question 1) \_\_**Pixel\_** are small points of colored light arranged in a grid to form a computer display.

Question 2) A thin film transistor (TFT) form of liquid crystal display (LCD) known as an \_**active matrix­\_.**

TRUE OR FALSE

\_\_**T**\_ Brightness refers to how close to white pixels are.

\_\_**T** The number of samples in a second is called the sampling rate.

MULTIPLE CHOICE

The digitizing process where sound is picked up by a microphone is what?

1. **analog-to-digital converter (ADC)**
2. digital-to-analog converter
3. compression ratio
4. lossy compression
5. none of the above

The process where pixels must be converted to text is known as what?

1. Nyquist rule
2. Bias-free universal medium principle
3. Compression
4. Optical character recognition
5. None of the above

**Chapter 9**

FILL IN THE BLANK

Question 1) **\_Operating system (OS)\_** is the software that makes the computer into a useful device.

Question 2) \_**Fetch/execute cycle\_** consists of getting the next instruction, figuring out what to do, gathering the date needed to do of getting the next instruction, figuring out what to do, and etc.

TRUE OR FALSE

**\_\_F\_** Added processing by a piece of software called a operand gives the keyboard’s key presses their standard meaning and behavior.

**\_\_T\_** An assembler is a program that creates binary memory words by replacing our symbolic letters with their binary equivalent.

MULTIPLE CHOICE

What is computer memory called?

1. RAM
2. Megabytes
3. Cache
4. Gigabytes
5. None of the above

What is memory organized as a sequence of?

1. Cache
2. Megabytes
3. Discrete locations
4. Binary
5. None of the above

Short Essay

What is debugging and what is the process of debugging?

Debugging is a process used to figure out why an application or system does not work properly. The first step in debugging it to check if the error is reproducible. The next step is to be sure that you know exactly what the problem is. The third step is to check all the “obvious” error sources and next, one must isolate the problem by dividing the operation into those parts that are working and those that are not. Debugging is important.