

## **Exams**

### **Intranets**

An intranet is an organization's internal private network that uses the infrastructure and standard technology, protocols, and hypertext link of the public Internet and Web.

### **Extranets**

Extranets are private intranets that connect not only internal personnel but also selected suppliers and other strategic parties via the public communications system.

### **Touch Screen & Multi Touch Screen**

A touch screen is a display screen that has been sensitized to receive input from the touch of a finger.

A multi-touch screen is a display screen that allows two or more fingers or other gestures such as pinching motions to be recognized as input at any one time.

**B2B:** Business to business commerce, or B2B commerce, is the electronic sale or exchange of goods or services directly between companies, cutting out traditional intermediaries.

**B2C:** Business to consumer commerce, or B2C commerce is the electronic sale or exchange of goods and services from the companies directly to the public, or end users.

## **Computer Technology & Communication Technology**

### **Computer Technology**

a computer is a programmable, multiuse machine that accepts data – raw facts and figures –and processes, or manipulates, it into information we can use such as summaries, totals, or reports.

### **Communications Technology**

Communications technology, also called telecommunications technology, consists of electromagnetic devices and systems for communicating over any distance.

**CONNECTIVITY** Connectivity refers to the connection of computers to one another by a communications line in order to provide online information access and/or the sharing of peripheral devices.

**INTERACTIVITY** Interactivity refers to two-way communication; the user can respond to information he or she receives and modify what a computer is doing.

## **RAM**

RAM (random access memory) chips temporarily hold (1) software instructions and (2) data before and after it is processed by the CPU.

## **ROM**

ROM (read-only memory) cannot be written on or erased by the computer user without special equipment. ROM chips contain fixed start-up instructions.

## **Input Hardware**

Input hardware consists of devices that translate data into a form the computer can process.

## **Output Hardware**

Output hardware consists of devices that translate information processed by the computer into a form that humans can understand.

## **Drawing Programs**

A drawing program is graphics software that allows users to design and illustrate objects and products. Drawing programs create vector image –images created from geometrical formulas. Almost all sophisticated graphics programs use vector graphics

## **Painting Programs**

Painting programs are graphics programs that allow users to simulate painting on-screen.

Painting programs produce bit-mapped images, or raster images, made up of little dots. Painting software is also called image-editing software because it allows you to retouch photographs, adjust the contrast and the colors, and add special effects, such as shadows.

## **Processor Chip**

A processor chip (CPU, for central processing unit) is a tiny piece of silicon that contains millions of miniature electronic circuits.

## **Peripheral Device**

peripheral device is any component or piece of equipment that expands a computer's input, storage, or output capabilities.

## **Web Portals**

A web portal, or simply portal, is a type of gateway website that functions as an “anchor site,” a major starting point, for users when they connect to the web.

## **Spread Sheet Program**

A spreadsheet program, or worksheet, allows users to create tables and financial schedules by entering data and formulas into rows and columns arranged as a grid on a display screen.

## **Transistor**

A transistor is essentially a tiny electrically operated switch, or gate, that can alternate between “on” and “off” many millions of times per second.

## **Machine Cycle**

Machine cycle, the CPU (1) fetches an instruction, (2) decodes the instruction, (3) executes the instruction, and (4) stores the result.

## **Firewall**

A firewall is a system of hardware and software that protects a computer or a network from intruders.

## **Ethernet**

Ethernet is a network standard for linking all devices in a local area network that describes how data can be sent between computers and other networked devices usually in close proximity.

## **Peer to Peer Network**

In a peer-to-peer network, all microcomputer on the network communicate directly with one another without relying on a server.

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## **What is a plotter? Explain the three principal kinds of plotters.**

A plotter is a specialized output device designed to produce large, high-quality graphics in a variety of colors.

The three principal kinds of plotters are pen, electrostatic, and large-format.

**Pen:** A pen plotter uses one or more colored pens to draw on paper or transparencies.

**Electrostatic:** In an electrostatic plotter, paper lies partially flat on a table-like surface, and toner is used in a photocopier-like manner.

**Large-Format:** Large-format plotters operate somewhat like an inkjet printer but on a much larger scale. This type of plotter is often used by graphic artists.

**Explain the basic network topologies?**

The layout, or shape, of a network is called a topology.

**Star Network**

A star network is one in which all microcomputers and other communications devices are directly connected to a central network switch.

**Ring Network**

A ring network is one in which all microcomputers and other communications devices are connected in a continuous loop.

**Bus Network**

In a bus network, all nodes are connected to a single wire or cable, called the bus. The bus has two endpoints, or terminators, which stop the network signal. Each communications device on the network transmits electronic messages to other devices.

**Tree Network**

A tree network is a bus network of star networks.

**Mesh Network**

A mesh network is based on the principle that each node has more than one connection to the other nodes so that message can take any possible shortest, easiest route to reach its destination.

**What are the five steps in programming process is?**

The five steps in the programming process are as follows:

1. Clarify/define the problem – include needed output, input and processing requirements.
2. Design a solution – use modeling tools to chart the program.
3. Code the program – use a programming language's syntax, or rules, to write the program.
4. Test the program—get rid of any logic errors, or “bugs,” in the program (“debug” it).
5. Document and maintain the program – include written instructions for users, explanation of the program, and operating instructions.

**What are the qualities of good information?**

Having good information is critical to the success of any organization.

**Correct and verifiable:** This means information must be accurate and checkable.

**Complete yet concise:** Complete means information must include all relevant data. Concise means it includes only relevant data.

**Cost-effective:** This means information is efficiently obtained and understandable.

**Current:** Current means timely yet also time-sensitive, based on historical, present, or future information needs.

**Accessible:** This means the information is quickly and easily obtainable.

### **What are the three principal components of a database do?**

**A Data Dictionary**, also called a repository or database schema, is a document or file that stores the data definitions and descriptions of the structure of data used in the database.

**DMBS Utilities** are programs that allow you to maintain the database by creating, editing and deleting data, records and files.

**Report Generator:** program for producing an on-screen or printed document form all or part of a database.

### **Describe the variety of threats to computes & communications systems.**

- Human errors
- Procedural errors
- Software errors
- “Dirty data” problems
- Electromechanical problems
- Natural hazards
- Theft of hardware
- Theft of software
- Theft of intellectual property
- Theft of time and services
- Theft of information
- Internet-related fraud
- Crimes of malice: crashing entire system.