CIT202 (SMS208) COMPUTER APPRECIATION FOR MANAGERS SUMMARY

There is one single definition of a computer.
False

There is no one single definition of a computer.
True

A _____ is a fast operating machine that can be used for the home and business to enhance productivity.
Computer

A _____ is a collection of electronic parts or hardware that has a set of electronic instructions called software.
Computer

All computers perform the same basic functions; they enable you to store and manipulate information.

A few years ago computers were easily classified as mainframe, minicomputer or_____.
Microcomputer

_____ computers were physically large and powerful systems capable of supporting hundreds of users.
Mainframe

Microcomputers were small humble machines with 8-bit or 16-bit processors, 16Kb to 256Kb of RAM and 5 to 10 Mb of disk storage, used mainly for games and basic word processing.

_____ is the term used for the most powerful computer available at any time.
Supercomputer

Supercomputers are typically tailored for very fast processing of what are known as _____ applications.
number crunching

The _____ is the most well known supercomputer named after its designer, Seymour Cray.
Cray

_____ are the most common type of computers in existence today
Microcomputers

A _____ is a computer with a microprocessor as its central processing unit.
Microcomputer
A _____ is a personal computer (PC) in a form intended for regular use at a single location, as opposed to a mobile laptop or portable computer.
desktop computer

The term _____ refers specifically to a horizontally-oriented case, usually intended to have the display screen placed on top to save space on the desk top.
Desktop

A _____ is a handheld computer also known as small or palmtop computers.
Personal Digital Assistant (PDA)

A Personal Digital Assistant (PDA) is also known as small or_____.
palmtop computers

WWAN stands for_____
Wireless Wide-Area Networks

A _____ is a small and lightweight portable computer, with most of the features of a standard laptop computer but smaller.
Subnotebook

The term "ultra-mobile PC" (UMPC) is also frequently used to refer to such machines, although this also refers to a small form-factor tablet PC platform.

Subnotebooks are smaller than laptops but larger than handheld computers and UMPCs.

A _____or simply laptop (also notebook computer, notebook and notepad) is a small mobile computer, typically weighing 3 to 12 pounds (1.4 to 5.4 kg)
laptop computer

Laptops may utilize a touchpad also known as a_____
Trackpad

The term _____ was coined at the time when most computers were cabinet sized like Mainframe Computers.
Mini computer

_____ were much smaller, less powerful, and much less expensive than Mainframe Computers.
Mini computers

Mini computers were typified by small word sizes such as 8 or 16 bits whereas larger machines had larger word sizes.

_____ is a largely obsolete term for a class of multi-user computers that lies in the middle range of the computing spectrum, in between the largest multi-user systems (mainframe computers) and the smallest single-user systems.
Minicomputer

_____ computers are used in large institutions such as government, banks and large corporations.
Mainframe

_____ (often colloquially referred to as Big Iron) are computers used mainly by large organizations for critical applications,

typically bulk data processing such as census, industry and consumer statistics, ERP, and financial transaction processing.
Mainframes

_____ refers to computers compatible with the computer architectures established in the 1960s.
Mainframe

Large systems that are not based on the System/360 are referred to as either "servers" or "supercomputers".

The first Web server running anywhere outside Switzerland ran on an IBM mainframe at Stanford University as early as _____
1990

_____refers to a computer that is dedicated to the task of storing and retrieving large amounts of data
Server

_____ process web pages and web applications.
Web servers

_____ are computers that are intended to serve one user and may contain special hardware enhancements not found on a personal computer.
Workstations

_____ (more commonly known as PDET's) are handheld devices that are used to record or capture data away from the mainframe computer that they are linked to.
Portable data entry terminals

Examples of PEDTs include: Barcode readers Gas Meter Optical mark readers (as in lottery ticket readers) Optical character recognition Scanner Graphics tablet Magnetic stripe reader

_____ computers are general purpose CPUs that are a part of a machine or device
Embedded

_____ computer runs a program that is stored in read only memory (ROM) and is only intended to operate a specific machine or device
Embedded

A _____is focused on performing one task involving intense numerical calculations such as weather forecasting and solving scientific problems.
Supercomputer

A computer system is made up of both hardware and_____.
Software

Software is another term for_____.
computer program

_____controls the computer and makes it do useful work.
Software

Without software a computer is useless
True

_____ refers to the physical components that make up a computer system.
Hardware

CPU stands for_____
Central Processing Unit

_____ is the memory that the computer uses to temporarily store the information as it is being processed.
Random Access Memory or RAM

The more information being processed the more _____ the computer needs.
RAM

One of the first home computers used 64 kilobytes of RAM memory (Commodore 64).

RAM memory chips come in many different sizes and speeds and can usually be _____
Expanded

Memory chips range in size from 1 Mb to 4 Gb.

The physical component or materials on which data are stored are called_____.
storage media

A _____ is a piece of hardware that permanently store information.
storage device

_____ are used to store information.
Disks

All information on computers are stored in_____.
Files

The size of a file is measured in_____.
Bytes

A _____is approximately one character (letter 'a', number '1', symbol '?'
Byte

A byte is made up of _____ bits.
8

A bit is simply an on or an off signal which passes through the computers circuitry.

Every piece of software can be broken down into a series of on or off signals or its _____
Binary Code

About a thousand bytes is a kilobyte (Kb).

About a million bytes is a megabyte (Mb).

About a billion bytes is a gigabyte (Gb).

About a trillion bytes is a Terabyte

One Terabyte is a Petabyte

One Petabyte is an Exabyte

Disk are a common way of transporting information such as bringing files home from work or sharing files.

_____ have become less useful as file sizes increase and Compact disks (CDs) and Digital Video Devices (DVDs) are becoming more popular.
Floppy disks

Compact disks or CDs can store large amounts of information.

CD-RW which stands for _____
Compact Disk - Read/Write

DVD disks can store _____ Gb on standard disk
4.5

_____ allow you to store large files, such as movies, on a single disk.
DVD recorders

_____ store the majority of information on today's modern computer.
Hard disks

Floppy disk or diskette comes in two basic sizes; 5.25 inch and 3.5 inch.

Information is stored in an _____ form much like a cassette or video tape.
Electromagnetic

The _____ is the storage device which contains computer files - or software
Disk

The _____ is the mechanism that runs the disk.
Drive

_____ or thumb drives work slightly differently as they use memory cards to store information on.
USB Flash Drives

Flash drives or thumb drives range from 512 Mb to 8 Gb in capacity.

_____ are the computer hardware that accept data and instructions from a user.
Input devices

The _____ and mouse are the most widely used input devices
Keyboard

The keyboard and _____are the most widely used input devices
Mouse

The _____is used to type information into the computer or input information.
Keyboard

The standard keyboard has _____ keys.
101

_____ designed keyboards are designed to make typing easier.
Ergonomically
The _____ is used as a pointing device and to select options from menus.

Mouse

A _____ is used for the same purposes as a mouse and is popular on laptop computers.
tracker ball

A touch sensitive screen is a method of input based on touching a specially designed screen in particular places.

_____ can be used to point at a monitor, serving a similar function as a mouse.
Light Pen

OCR stands for_____
Optical Character Recognition

In order to automate processing such payments, a form of input called _____ was developed.
optical character recognition

The QWERTY keyboard, so called because the keys 'q','w','e','r','t' and 'y' are adjacent, is the commonest form of keyboard.

MICR stands for_____
Magnetic Ink Character Recognition

The _____ is translated to a number which can be used by the computer to identify the product and look up its price in a database.
Barcode

_____ are devices which scan an image (document, photograph) and produce a digital version of the image i.e. the image is stored as a sequence of binary numbers.
Image Scanners

The term _____ is used to describe the application of this technique and it is becoming an important application in insurance and banking organisations.
document image processing (DIP)

_____ return processed data that is information back to the user or allow the computer to communicate with the user.
Output devices

Most desktop computers use a monitor with a _____
cathode tube

Most notebooks use a _____monitor.
Liquid Crystal Display (LCD)

The three basic types of printer are; dot matrix, inkjet, and_____.
Laser

A _____ is used to translate information transferred through telephone lines or cable.
Modem

The term modem stands for modulate and demodulate which changes the signal from digital, which computers use, to analog, which telephones use and then back again.

Modems are measured by the speed that the information is transferred and the measuring tool is called the _____
baud rate

Information is transferred in _____
Packets

The amount of information that can travel through a line is limited is called _____
Bandwidth

Scanners allow you to transfer pictures and photographs to your computer.

Most scanners use _____ software that makes the scanner accessable by other software applications.

TWAIN

_____ are used to take digital photographs.
Digital cameras

_____ allow computers to produce sound like music and voice.
Sound Cards

The older sound cards were 8 bit then 16 bit then 32 bit.

_____ allow computers to produce colour (with a colour monitor of course).
Colour Cards

Video Cards allow computers to display video and animation.

Network cards allow computers to connect together to communicate with each other

Cables connect internal components to the Motherboard

There are two types of cable which may be used. One is called a serial cable and the other a parallel cable.

A computer system is made up of both _____ and software.
Hardware

There are many terms used for the process of accessing software including

- Running
- Executing
- Starting up
- Opening

_____refers to parts of the computer which do not have a material form, such as programs, data, protocols
Software

_____ is a general term used to describe a collection of computer programs, procedures and documentation that perform some tasks on a computer system.
Software

Computer programs allow users to _____ tasks
Complete

Examples of software programs or applications would be the Operating System (DOS, Windows 9x/Millenium/XP, O/S2, UNIX, MacOS 9.x/10.x and various others), Wordprocessor (typing letters), Spreadsheet (financial info), Database (inventory control and address book), Graphics program, Internet Browser, Email and many others.

Practical computer systems divide software systems into three major classes:

- system software
- programming software
- application software

_____ gives the user the right to use the software in the licensed environment
Software license

All files are stored in a _____
Directory

DPI stands for_____
Dots Per Inch

RAID stands for_____
Redundant Arrays of Inexpensive Disks

_____displays a list of the programs that are installed through Windows and available to use.
Program or Dock

_____ displays a list of the last 15 documents used allowing the user to open them directly from this menu.
Documents

_____ displays system components, such as printers, control panel and taskbar.
Settings

_____ has search abilities to find files, folders and phrases in documents on your computer.
Find/Search

_____ displays help topics broken up into contents, index and find components.
Help

_____ allows you to start a program from a command line.
Run

_____ shuts down the computer, restarts the computer or logs you off a network.
Shut down

_____ allows users to leave a task running while working on another
32 bit Preemptive Multitasking

_____ is used to display event specific or context sensitive menus (Microsoft)
Right Mouse button

_____ feature allows files or other information to be dragged from one area and dropped in a new location or into another application.
Drag and Drop

_____ make your Desktop behave like a web site (Microsoft).
Active Windows

_____ automates updating software through the Internet.
Software Update

_____ provides information about the computer system
System Information or Profile
_____ list general topics grouped by subject.
Contents

_____ list specific topics accessed by scroll bars or typing the topic.
Index

_____ creates an index of words in Help and allows searches by word or phrase
Find

An _____ is the software component of a computer system that is responsible for the management and coordination of activities and the sharing of the resources of the computer.
Operating System

GUI stands for_____
Graphical User Interface

The Microsoft Windows family of operating systems originated as an add-on to the older MS-DOS operating system for the IBM PC.

The differentiate types of operating systems commonly available

- Microsoft Windows
- Plan 9
- Mac OS X

An _____ is a collection of technologies which are designed to allow the computer to perform certain functions.
operating system

The initial code executing on the computer is loaded from firmware which is stored in read only memory (ROM) is called the_____.

BIOS or boot ROM

_____refers to the running of multiple independent computer programs on the same computer, giving the appearance that it is performing the tasks at the same time.
Multitasking

A _____ is a specific type of computer software developed to allow interaction with hardware devices.
device driver

The Functions of Operating Systems

- Providing User Interface
- Managing the Hardware
- Managing the File System
- Supporting Programs

A real-time operating system (RTOS) is a multitasking operating system intended for applications with fixed deadlines (real-time computing).

An operating system's most basic function is to support the running of programs by the users.

Application programs or software consists of programs that perform specific tasks such as writing a letter, tracking payroll information, producing a chart and so on

Windows comes with WordPad to edit and format documents and NotePad to edit text.

A _____ is a collection of information stored in a way that makes it easy to retrieve, modify and search.
Database

Each person or item in a database has it's own Record. Each piece of information about that person or record are stored in Fields.

All the information in all the records makes up the _____
Database

The intersection of spreadsheet row and column is called a _____

Cell

Spreadsheets use _____ to create simple to complex mathematical equations.

formulas

A _____ can be built to handle the financial needs of businesses.

Sheet

The three main bitmapped format graphics used on the Internet are

- .gif
- .jpeg (.jpg)
- .png

MPEG stands for_____

Moving Picture Experts Group

MIDI stands for _____

Musical Instruments Digital Interface

_____ are anything that can be displayed on the screen except the text and sometimes even text falls into the graphics category if it is saved in a graphics format.

Computer graphics

A _____ is computer software designed for the purpose of managing databases based on a variety of data models.

database management system (DBMS)

DBMS stands for_____

Database Management System

DBMSs are complex set of software programs that control the organization, storage, management, and retrieval of data in a database.

3.5 List of Database Management Systems Software

Examples of DBMSs include:

Oracle
DB2
Sybase Adaptive Server Enterprise
FileMaker
Firebird
Ingres
Informix
Microsoft Access
Microsoft SQL Server
Microsoft Visual FoxPro
MySQL
PostgreSQL
Progress
SQLite
Teradata
CSQL
OpenLink Virtuoso

A database management system (DBMS) is computer software designed for the purpose of managing databases based on a variety of data models.

A DBMS is a complex set of software programs that controls the organization, storage, management, and retrieval of data in a database.

Systems development life cycle is a procedure for automating manual systems and solving problem with computer programs.

SLDC stands for_____

Systems Development Life Cycle

Typical SDLC phases are the following:

- Planning/Feasibility Definition
- Analysis Design
- Implementation
- Testing
- Maintenance
- Evaluation

_____ is the study of the ongoing environment to identifying problem solving possibilities.
Planning

_____ is the first step in an SDLC aimed at identifying the business need of an organization.
Planning

_____ is the study of the problem environment and subsequent definition and prioritization of the requirements for solving the problem.
Systems analysis

_____ is the evaluation of alternative problem solutions, and the detailed specification of the final system
Systems design

_____ is the construction or the assembly of the problem solution culminating in new environment based on the solution.
Systems implementation

_____ consists of making sure that the system runs in operational use and continues to do so for as long as is required.
Systems maintenance

A personal area network (PAN) is a computer network used for communication among computer devices close to one person.

A Metropolitan Area Network is a network that connects two or more Local Area Networks or Campus Area Networks together but does not extend beyond the boundaries of the immediate town/city.

A WAN is a data communications network that covers a relatively broad geographic area (i.e. one city to another and one country to another country) and that often uses transmission facilities provided by common carriers, such as telephone companies.

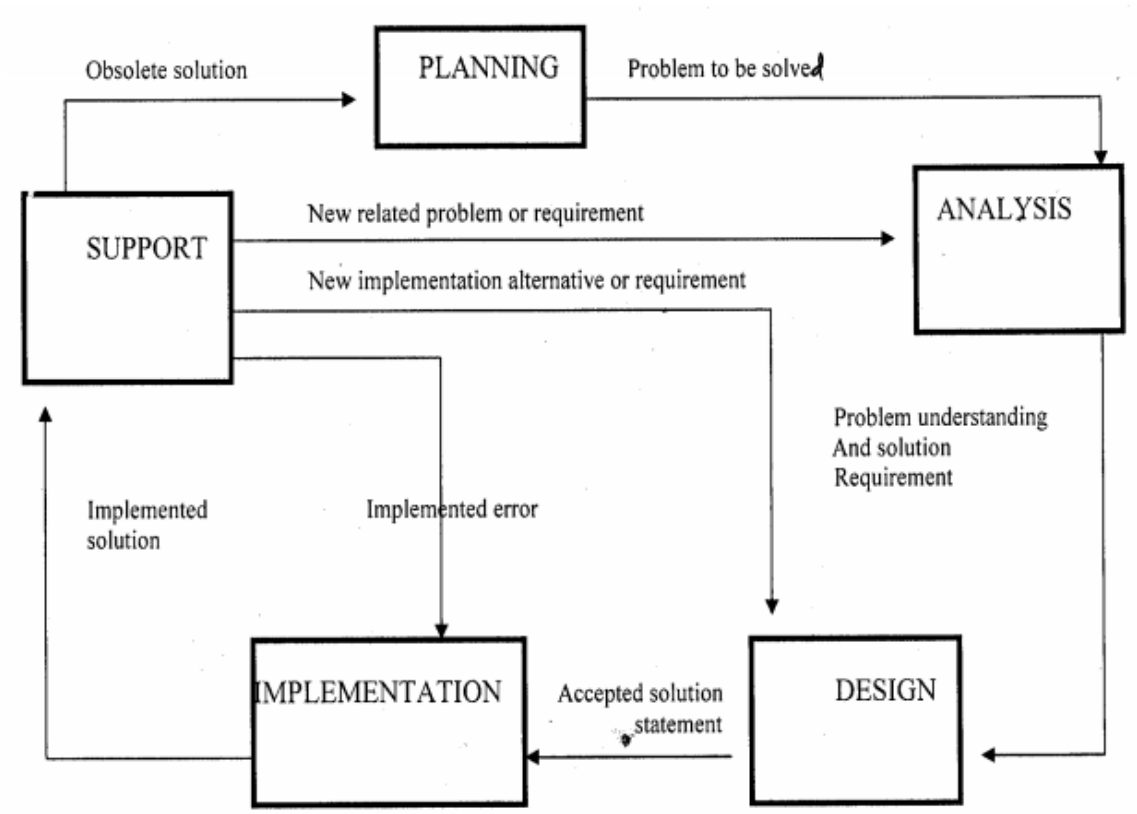
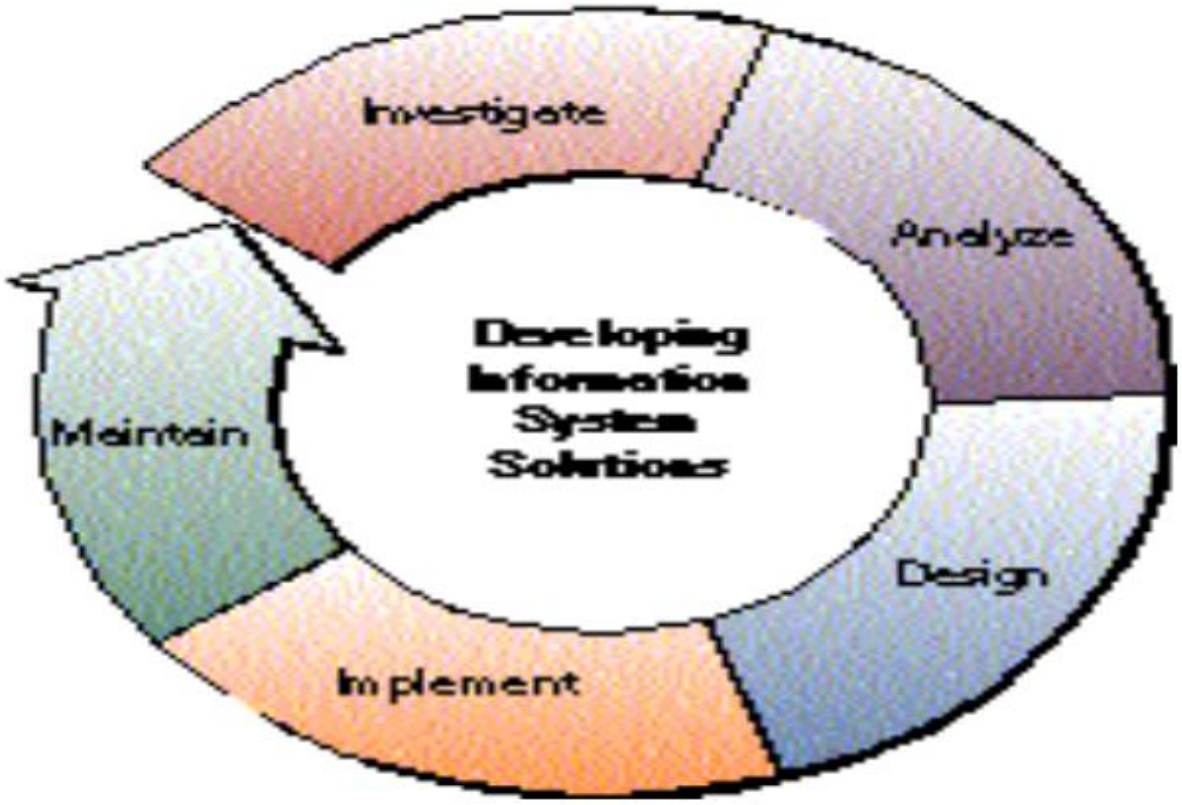


Figure 1: A 5-Phase SDLC



A _____ is a group of interconnected computers.
computer network

PAN stands for_____
Personal area network

LAN stands for_____
Local Area Network

CAN stands for _____
Campus Area Network

MAN stands for _____
Metropolitan area network

WAN stands for _____
Wide area network

An _____ is a set of interconnected networks, using the Internet Protocol and uses IP-based tools such as web browsers and ftp tools, that is under the control of a single administrative entity.

Intranet

An _____ is a network or internetwork that is limited in scope to a single organization or entity
Extranet

A network card, network adapter or NIC (network interface card) is a piece of computer hardware designed to allow computers to communicate over a computer network.

A repeater is an electronic device that receives a signal and retransmits it at a higher level or higher power, or onto the other side of an obstruction, so that the signal can cover longer distances without degradation.

A _____ connects multiple network segments at the data link layer (layer 2) of the OSI model.
network bridge

_____ Directly connect local area networks (LANs)
Local bridges

_____ can be used to create a wide area network (WAN) link between LANs.
Remote bridges

_____ can be used to join LANs or connect remote stations to LANs.
Wireless bridges

A switch is a device that performs switching.

Routers are networking devices that forward data packets between networks using headers and forwarding tables to determine the best path to forward the packets.

_____ on networks begins with passwords.
Security

Security on networks begins with_____.
Passwords

The Internet Corporation for Assigned Names and Numbers (ICANN) is the authority that coordinates the assignment of unique identifiers on the Internet, including domain names, Internet Protocol (IP) addresses, and protocol port and parameter numbers.

_____ is a specific internetwork, consisting of a worldwide interconnection of governmental, academic, public, and private networks based upon the Advanced Research Project Agency Network (ARPANET) developed by ARPA of the U.S.
Internet

WWW stands for_____
World Wide Web

The term _____ generally refers to small programs designed to take advantage of a software flaw that has been discovered, either remote or local.
Exploit

A _____ in a computer system (or cryptosystem or algorithm) is a method of bypassing normal authentication, securing remote access to a computer, obtaining access to plaintext
backdoor

A _____ is a program designed by a computer programmer (malicious hacker) to do a certain unwanted function.
Virus

A state of computer "security" is the conceptual ideal, attained by the use of the three processes: Prevention, Detection and Response.