

www.CsePedia.com

Punjab Technical University

B.Tech. – Computer Science & Engineering (Sem. – 6th)

Introduction to Business System

Subject Code: CS-304

2 Mark Questions:-

Q:-1) What is Sequential Index File? (May 2012)

Ans:-1) INDEXED SEQUENTIAL FILE ORGANIZATION

When there is need to access records sequentially by some key value and also to access records directly by the same key value, the collection of records may be organized in an effective manner called Indexed Sequential Organization.

You must be familiar with search process for a word in a language dictionary. The data in the dictionary is stored in sequential manner. However an index is provided in terms of thumb tabs. To search for a word we do not search sequentially. We access the index that is the appropriate thumb tab, locate

an approximate location for the word and then proceed to find the word sequentially.

Q:-2) Why Problem analysis is Important? (May 2012)

Ans:-2) Problem analysis is used to gather information that helps you determine the nature of a problem encountered on your system.

The problem analysis information is used to:

- Determine if you can resolve the problem yourself.
- Gather sufficient information to communicate with a service provider and quickly determine the service action that needs to be taken.

Q:-3) What are the characteristics of a good MIS System? (May 2012)

Ans:-3) MIS characteristics

- In any organization managers will have varieties of tasks to manage. MIS is mainly designed to take care of the needs of the managers in the organization.
- Organizations will have different departments like marketing, production, sales, inventory, maintenance etc. Each of these departments function individually and also in relationship with other departments. Information is available in abundance. MIS aids in

integrating the information generated by various departments of the organization.

- MIS helps in identifying a proper mechanism of storage of data. The data is maintained in such a way that the unnecessary duplication of data is avoided.
- MIS also helps in establishing mechanism to eliminate redundancies in data.
- MIS as a system can be broken down into sub systems. Each such sub system may be programmed. This results in easy access of data, accuracy of data and information. It helps in maintaining the consistency of data.

Q:-4) What is the difference between Literal and Figurative constants in COBOL? (May 2012)

Ans:-4) Literal means any value given by the user. It may be a String or Numeric value.

Figurative constants are reserved words that name and refer to specific constant values.

For Ex: - **ZERO, ZEROS, ZEROES:** - Represents the numeric value zero (0) or one or more occurrences of the character zero, depending on context.

SPACE, SPACES: - Represents one or more blanks or spaces

Q:-5) What is Resource Planning? (May 2012)

Ans:-5) Enterprise Resource Planning (ERP) systems integrate internal and external management of information across an entire organization—embracing finance/accounting, manufacturing, sales and service, customer relationship management, etc. ERP systems automate this activity with an integrated software application. The purpose of ERP is to facilitate the flow of information between all business functions inside the boundaries of the organization and manage the connections to outside stakeholders.

Q:-6) Define Inter Record Gap and where it is used? (May 2012)

Ans:-6) Inter Record gap is a break between data records on hard drive and magnetic tape that serves as a safety margin for data overwrites. Inter Record gaps are also used as a marker for the end of data.

**Q:-7) Explain differences among Sectors, Cylinders and Tracks?
(May 2012)**

Ans:-7) Disk Platters are formatted in a system of concentric circles, or rings, called **tracks**. Within each track are **sectors**, which subdivide the circle into a system of arcs, each formatted to hold the same amount of data—typically 512 bytes. Once upon a time, the block size of file systems was coupled with the sector size of a disk. Today the block size of a file system can range considerably, but it is usually some multiple of 512 bytes.

Cylinders are the system of identical tracks on multiple platters within the drive. The multiple arms of a drive move together in lockstep, positioning the heads in the same relative location on all platters simultaneously.

Q:-8) Differentiate between Master and Transaction File? (May 2012)

Ans:-8) Master File:

A collection of records pertaining to one of the main subjects of an information system, such as customers, employees, products and vendors. Master files contain descriptive data, such as name and address, as well as summary information, such as amount due and year-to-date sales.

Transaction File:

A collection of transaction records. The data in transaction files is used to update the master files, which contain the data about the subjects of the organization (customers, employees, vendors, etc.). Transaction files also serve as audit trails and history for the organization. Where before they were transferred to offline storage after some period of time, they are increasingly being kept online for routine analyses. See data warehouse, transaction processing and information system.

Q:-9) What are difference between DBMS and RDBMS? (Dec. 2012)

Ans:-9) DBMS stands for Database Management System which is a general term for a set of software dedicated to controlling the storage of data.

RDMBS stand for Relational Database Management System. This is the most common form of DBMS. Invented by E.F. Codd, the only way to view the data is as a set of tables. Because there can be relationships between the tables, people often assume that is what the word "relational" means. Not so. Codd was a mathematician and the word "relational" is a mathematical term from the science of set theory. It means, roughly, "based on tables".

Q:-10) What are the various symbols used in designing DFD? (Dec. 2012)

Ans:-10) A Data Flow Diagram (DFD) is a graphical representation of data through informative system. It differs from the flowchart as it shows the data flow instead of the control flow of the program. All problems for a program define by DFD. The moment of data through a system from entry to destination. In parallel processing a design in which a calculation is make either when all necessary data is available (data driven processing).

Data flow diagram is composed of the four basic symbols shown below.

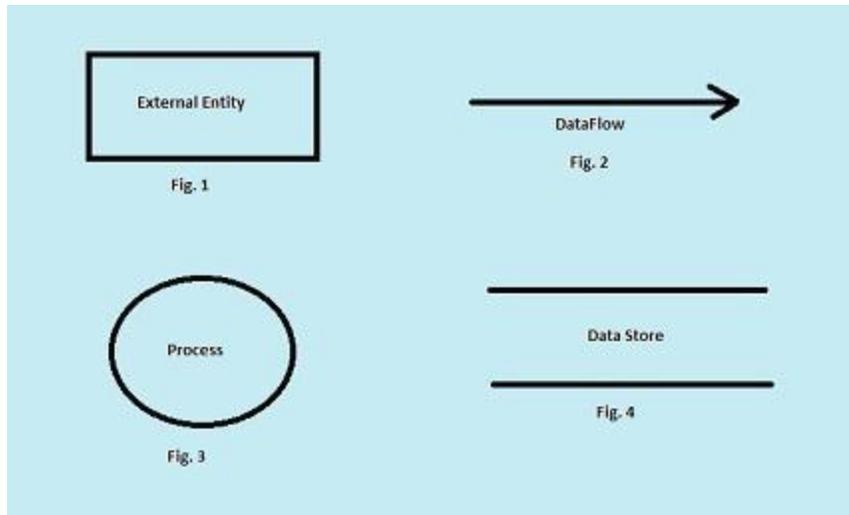
(1) External Entity:-The external entity symbol represents source of data to the system or destinations of data from the system. It represents by a

rectangle, External entities include End user, purchasing department, and Inventory system. See fig. 1

(2) **Data flow**:- Data flow represented with a line an arrow head on one end. A fork in a data flow means that the same data goes to two separate destinations. The same data coming from several locations can also be joined. Flows define the interfaces between the components within the system, and its external entities. See fig. 2

(3) **Processes**:- A process is some form of processing or data transformation which takes data as input, does something to it, and provides outputs. The process is the manipulation or work that transforms data, performing computations, decision making(logic flow) or directing data flows based on business rules. In other words, a process receives input and generates some output. Processes drawn as circles on a DFD, and include a process name. See fig. 3

(4) **Data store**: - A data store is where a process stores data between processes for later retrieval by that same process or another one. Files and tables are considered data store. Data store names (Plural) are simple but meaningful such as "Customers," "orders," and "products". Data stores are usually drawn as a two parallel lines and labeled by the name of data storage area it represents.



Q:-11) Difference between Data Modeling and Process Modeling?
(Dec. 2012)

Ans:11) Data modeling is the process of creating a conceptual model of data objects and how the data objects associate with each other in a database. Data modeling focuses on how the data objects are organized than on the operations that are performed on data.

Process modeling or specifically Business Process Modeling (BPM) involves representing processes of an enterprise such that the existing processes could be analyzed to improve quality and efficiency. BPM is generally a diagrammatic representation of the sequence of activities carried out in an organization. It displays the events, actions and connection points from start to the end of the sequence.

Q:-12) What is the Difference between MIS and DSS? (Dec. 2012)

Ans:12) A **Management Information System (MIS)** is a process that provides the information necessary to manage an organization effectively.

While **Decision support system (DSS)** is a computer program application that analyze business data and present it so that users can make business decisions more easily.

- **MIS** focus on operational efficiency (help organization "do things right")
- **DSS** focus on making effective decision (help organization "do the right thing")

Q:-13) What are the various uses of E-Commerce? (Dec. 2012)

Ans:-13) Electronic Commerce (e-Commerce) is the act of doing business electronically. This means that all your transactions are paperless and you use electronic means such as EDI (electronic data interchange), electronic mail, bulletin boards, fax transmissions, electronic fund transfers and the internet.

E-Commerce is by no means a new concept, even though with the internet the use of e-commerce has increased dramatically. E-Commerce has been implemented in the banking system for a long time (ever sent an electronic funds transfer?) and most businesses have been using EDI (Electronic data interchange) to transmit computer readable data in a standard format to another business. With the rapid increase of use by consumers and

businesses of the internet, e-commerce is now another option for many businesses.

Uses of E-Commerce

E-Commerce can be used for many things including the following:

- E-Commerce can also help improve your business processes and information flows by enabling you to communicate with other business.

Q:-14) What is 77 level used for in COBOL? (Dec. 2012)

Ans:-14) Level 77 is a special level-number which identify data items used for special purposes. Level 77 "Identifies data item description entries -- independent Working-Storage or Linkage Section items that are not subdivisions of other items, and are not subdivided themselves.

Q:-15) What are the advantages of Database System over a Paper based record system? (Dec. 2011)

Ans:-15) There are numerous advantages but basically db systems are faster, provide more security, can provide integrity checks.

Q:-16) Define the term Data, Database, DBMS, Database Catalog?
(Dec. 2011)

Ans:-16) Data: - Facts and statistics collected together for reference or analysis.

Database: - A structured set of data held in a computer, esp. one that is accessible in various ways.

DBMS: - Database Management System: a software system that facilitates the creation and maintenance and use of an electronic database.

Database Catalog: - The database catalog of a database instance consists of metadata in which definitions of database objects such as base tables, views (virtual tables), synonyms, value ranges, indexes, users, and user groups are stored.

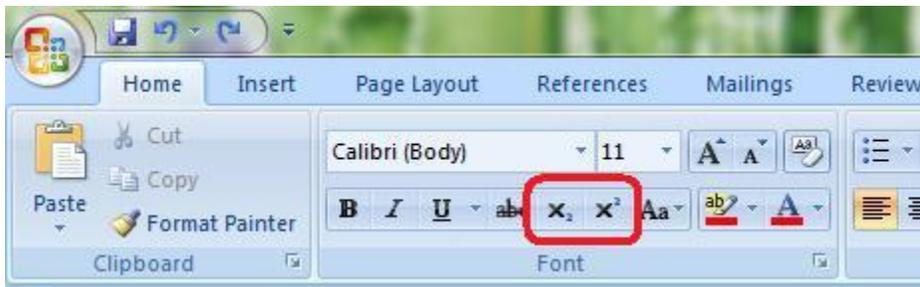
Q:-17) What are delimiters in COBOL? (Dec. 2011)

Ans:-17) *APOST and *QUOTE are mutually exclusive COBOL pre compiler options that name the **string delimiter** within COBOL statements. *APOST names the apostrophe (') as the string delimiter; *QUOTE names the quotation mark (").

Q:-18) How do you Superscript and Subscript a text in Ms Word?
(Dec. 2011)

Ans:-18) A **Subscript** appears smaller and below the baseline (Ex. H₂O or X₂) while a **Superscript** appears smaller and above the baseline (Ex. X³)

In **Word 2007**, select the character that you would like to change and Click the Superscript or Subscript symbol from the ribbon under the home tab.



Q:-19) What are the important features of Electronic spreadsheet?
(Dec. 2011)

Ans:-19) Spreadsheet has evolved to become not just a tool for accounts, but for many other aspects of business, including inventory tracking, customer databases and invoice creation. These new uses have come about through new features added to the programs and compatibility with other programs.

Instant Calculations

In addition to normal mathematical calculations, formulae added to spreadsheets can perform other functions, such as working on text. Variables

in formulae can refer to other cells in the spreadsheet, where they will be instantly updated should the value of that cell change.

For example, if you an electronic invoice with “Price” in one cell and “Quantity” in another, you can create a formula in a third cell that multiplies the values together. These computerized calculations increase the potential uses of the spreadsheet, reduce human error and save you the time of doing them manually.

Q:-21) What is the significance of ER Model? (May 2010)

Ans:-21) Entity Relationship Modeling (ER Modeling) is a graphical approach to database design. It uses Entity/Relationship to represent real world objects.

An **Entity** is a thing or object in real world that is distinguishable from surrounding environment. For example each employee of an organization is a separate entity. Following are some of major characteristics of entities.

Entities can have **relationships** with each other. Let’s consider a simplest example. Assume that each Microsoft Programmer is given a Computer. It is clear that that **Peter’s Computer** is also an entity. Peter is using that computer and the same computer is used by Peter. In other words there is a mutual relationship among Peter and his computer.

Q:-22) What is ERP? (May 2010)

Ans:-22) ERP is short for *Enterprise Resource Planning*

Enterprise resource planning (ERP) is business management software that allows an organization to use a system of integrated applications to manage the business. ERP software integrates all facets of an operation, including development, manufacturing, sales and marketing.

Q:-23) What is the main advantage of Relative files? (Dec. 2010)

Ans:-23) ADVANTAGES of RELATIVE FILES

1. Quite easy to process,
2. If you can know the key value of the record that you need to find, there is no need for a search and you can access the record almost instantaneously,

Q:-24) What are the main features of Word Processor Software? (Dec. 2010)

Ans:-24) A **word processor is a computer application used for the production (including composition, editing, formatting and possibly printing) of any sort of printable material.**

This program will enable the user to write articles, books, letter documents, reports, etc. It makes editing a very simple task.

The main features of this program are:-

Font Application, Spell Check, Grammar Check, Thesaurus, Autocorrect, Auto text, Web integration, HTML documentation etc.

Q:-25) What are the various Divisions in COBOL? (Dec. 2010)

Ans:-25) COBOL program code is divided into four basic division: IDENTIFICATION, ENVIRONMENT, DATA, and PROCEDURE divisions.

IDENTIFICATION DIVISION

The identification division tells the computer the name of the program and supplies other documentation concerning the program's author, when it was written, when it was compiled, who it is intended for...etc. In fact, only the program name is required by the compiler.

ENVIRONMENT DIVISION

This division tells the computer what the program will be interacting with (i.e. its environment) such as printers, disk drives, other files etc... As such, there are two important sections: the CONFIGURATION SECTION (which defines the source and object computer) and the INPUT-OUTPUT SECTION (which defines printers, files that may be used and assigns identifier names to these external features).

DATA DIVISION

The data division is where memory space in the computer is allocated to data and identifiers that are to be used by the program. Two important sections of this division are the FILE SECTION and the WORKING-STORAGE SECTION. The file section is used to define the structure, size and type of the data that will be read from or written to a file.

PROCEDURE DIVISION

The procedure division is where the logic of the program actually found. COBOL is a modular language, in that a program is usually broken up into units described as paragraphs.

Q:-26) What is the need of Software Engineering? (Dec. 2010)

Ans:-26) Software engineering (SE) is the application of a systematic, disciplined, quantifiable approach to the design, development, operation, and maintenance of software, and the study of these approaches; that is, the application of engineering to software.