

Describe briefly, the following terms with reference to Information Technology.

1. **Switch:** It is hardware device used to direct messages across a network. Switches create temporary point to point links between two nodes on a network and send all data along that link.
2. **Modem:** It stands for Modulator/Demodulator and is an encoding as well as decoding device used in data transmission that converts a digital computer signal into an analog telephone signal (i.e. it modulates the signal) and converts an analog telephone signal into a digital computer signal (i.e. it demodulates the signal) in a data communication system.
3. **HTML:** HTML (Hypertext Markup Language) is used to create Web pages. HTML lets the creator of a Web page specify how text will be displayed and how to link to other Web pages, files, and Internet services.
4. **Site Blocking:** Site Blocking is software based approach that prohibits access to certain Web sites that contain explicit objectionable material or are deemed inappropriate by management of any organization to prevent employees from accessing these sites from company Internet servers.
5. **Buffering:** Buffering enables the processor to execute another instruction while input or output is taking place rather than being idle while transfer was completed.
6. **Data Transformation:** The Data Transformation is performed by Data Transformation layer; a component of Data Warehouse; that receives data from the data sources, cleans and standardizes it, and loads it into the data repository.
7. **Mirror Log:** A mirror log is an optional file and has a file extension of .mlg. It is a copy of a transaction log and provides additional protection against the loss of data in the event the transaction log becomes unusable.
8. **Chat Server:** Some organizations choose to run a server that allows multiple users to have real-time discussions, called chats on the Internet. Most chat servers allow the creation of private chat rooms where participants can meet for private discussions.
9. **DDL Compiler:** DDL Compiler converts data definition statements into a set of tables. Tables contain meta-data (data about the data) concerning the database. It gives rise to a format that can be used by other components of the database.
10. **Primary Key:** The primary key of any table is any candidate key of that table, which the database designer arbitrarily designates as "primary". The primary key provides uniqueness to data for identification, for example- bank account number is used as primary key for its customers. The primary key may be selected for convenience, comprehension, performance, or any other reasons. Primary key uniquely identifies a record in a database.
11. **Repeaters:** Repeaters are devices that solve the snag of signal degradation, which results as data is transmitted along the cables. It boosts or amplifies the signals before passing it through to the next section of cable.
12. **Flow Chart:** A diagram that shows sequence of steps to solve a particular problem. It is a logical flow of step which shows sequence of operations of a program by using symbols and interconnecting lines.

13. **Spooling Software:** The purpose of spooling software is to compensate for the speed difference between the computer and its peripheral devices such as input and output devices. It is used in large system and network computing environment.
14. **Secured Electronic Transaction (SET):** Secured Electronic Transaction (SET) is a combination of a protocol designed for use by other applications and a standard for handling credit card transactions over the Internet. Designed for cardholders, merchants, banks, and other card processors, SET uses digital certificates to ensure the identities of all parties involved in a purchase. It also encrypts credit card and purchase information before transmission on the Internet.
15. **Meta Data:** Meta data is "data about data", which is used to inform operators and users of the data warehouse about its status and the information held within the data warehouse. The most recent date for loading data, the business meaning of a data item and the number of users that are logged in currently are examples of metadata.
16. **Transaction Log:** A transaction log is a file that records database modifications such as insert, update, delete, commit, rollback and database schema changes. The database engine uses a transaction log to apply any changes made between the most recent checkpoint and the system failure.
17. **DNS Server:** Domain Name Service (DNS) Server is an Internet-wide distributed database system that documents and distributes network specific information such as the associated IP address for a host name, and vice-versa. The host, storing this database is a DNS server.
18. **Multi-tasking:** This refers to the Operating System's ability to execute two or more tasks of a single user, concurrently. Multiple tasks are executed by the CPU switching between them. This is accomplished through foreground/background processing. In this method, the CPU time is shared by different processes.
19. **VPDN:** VPDN (Virtual Private Dial-Up Network) is a user-to-LAN connection used by a company that has employees, who need to connect to the private network from various remote locations.
20. **Uniform Resource Locators (URL):** A URL is the unique address for a file that is accessible on the Internet and are used to address and access individual web pages and internet resources. The format of URL is protocol / internet address / web page address.
21. **Intranet:** It is a type of information system that facilitates communication within the organization among widely dispersed departments, divisions and regional locations. Intranet connects people together with Internet technology using Web browsers, Web servers and Data warehouses in a single view.
22. **Wi-Fi:** It stands for Wireless Fidelity that describes the underlying technology of wireless local area network based on IEEE 802.11 specifications. It is used for mobile computing devices, Internet and VOIP phone access, gaming applications, consumer electronics, public transports and mobile commerce etc.
23. **Assembler:** It refers to a computer program that translates programs written in symbolic coding to produce machine language programs.

24. **Language Translators:** A Language Translator or language processor is a general term used for any assembler, compiler or other routine that accepts statements in one language and produces equivalent statements in another language. The language processor reads the source language statements one at a time and prepares a number of machine instructions to perform the operations specified or implied by each source statement. The three most widely used types of language translators are Compilers, Interpreters, and Assemblers.
25. **Shareware:** Shareware is software developed by individual and small companies that cannot afford to market their software worldwide or by a company that wants to release a demonstration version of their commercial product. Shareware software often is disabled in some way and has a notice attached to explain the legal requirements for using the product.
26. **Artificial Intelligence:** Artificial intelligence (AI) is the study and design of intelligent agents where an intelligent agent is a system that perceives its environment and takes actions that maximize its chances of success. It is the science and engineering of making intelligent machines.
27. **Electronic Mail:** Electronic Mail, abbreviated as email, is a method of composing, sending, storing, and receiving messages over electronic communication systems. The term e-mail applies both to the Internet e-mail system based on the Simple Mail Transfer Protocol (SMTP) and to intranet systems allowing users within one company to e-mail each other.
28. **Candidate Key:** A Candidate key is any set of one or more columns whose combined values are unique among all occurrences (i.e., tuples or rows). Since a null value is not guaranteed to be unique, no component of a candidate key is allowed to be null. There can be any number of candidate keys in a table.
29. **Hub:** A Hub is a multi port connecting device that is used to interconnect LAN devices. Each node is connected to the hub by means of simple twisted pair wires. The hub then provides a connection over a higher speed link to other LANs, the company's WAN, or the Internet. A hub can be used to extend the physical length of a network. Hubs can be active or passive. In case of passive hub, incoming signal is sent as it is, as output. Active hub can regenerate incoming signal and supports homogeneous network only.
30. **Network File Server:** A Network File Server is a computer system used for the purpose of managing the file system, servicing the network printers, handling network communications, and other functions. A server may be dedicated in which case all of its processing power is allocated to network functions, or it may be non-dedicated which means that a part of the server's functions may be allocated as a workstation or DOS-based system.

World Wide Web: The World Wide Web (WWW) is a component of the Internet that provides access to large amount of information located on many different servers. The web also provides access to many of the services available on the Internet.

The fundamental unit of the web is the web page which is defined as a text document that contains links to other web pages, graphic and audio files, and other Internet services such as File Transfer Protocol (FTP) and e-mail. Major functional components of the WWW are HTML, HTTP, URIs and Web Hardware and Software.

31. **Telnet:** Telnet is a protocol that allows us to connect to remote computers (called hosts) over a TCP/IP network (such as the Internet). We use software called a telnet client on our computer to make a connection to a telnet server (i.e., the remote host). Once our telnet client establishes a connection to the remote host, our client becomes a virtual terminal, allowing us to communicate with the remote host from our computer. In most cases, we will need to log into the remote host, which requires that we have an account on that system.
32. **Multiprogramming:** Multiprogramming is defined as execution of two or more programs that all reside in primary storage. The CPU can execute only one instruction at a time; it cannot simultaneously execute instructions from two or more programs. However, it can execute instructions from one program then from second program then from first again, and so on. This type of processing is referred to as "concurrent execution".
33. **Interpreter:** It refers to a language translator that converts source program written in high level language to machine code. Interpreter translates programs a line at a time as it is being run. Each statement is translated into machine language just before it is executed.
34. **Structured Query Language (SQL):** A query language is a set of commands to create, update and access data from a database allowing users to raise adhoc queries/questions interactively without the help of programmers. It is a computer programming language used to manipulate information in Relational Database Management Systems (RDBMS).
35. **Real Time Data Warehouse:** In this data warehouse, data is updated on a transaction or event basis, every time an operational system performs a transaction such as an order or a delivery or a booking etc.
36. **Partitioned Database:** It is a type of distributed database where processing of application programs and data can be performed at more than one site. In a partitioned database, the data base is divided into parts or segments that are appropriate for respective sites so that only those segments are distributed without costly replication of the entire data.
37. **Offline Data Warehouse:** These are data warehouses in which updation of data from the operational systems are done on a regular interval of time such as daily, weekly or monthly. The data in such a warehouse are stored in an integrated reporting-oriented data structure.
38. **File Volatility:** This refers to the number of additions and deletions to the file in a given period of time. A file that constantly keeps changing is a highly volatile file. An Indexed-sequential file organization will not be suitable for such files, because additions have to be placed in the overflow area and constant reorganization of the file would have to occur. Other direct access methods would be a better choice. Even the sequential file organization would be appropriate if there are no interrogation requirements.
39. **File Activity:** On the other hand is the proportion of master file records that are actually used or accessed in a given processing run. At one extreme is the real- time file where each transaction is processed immediately and hence at a time, only one master record is accessed. This situation obviously requires a direct access method. At the other extreme is a file, such as a payroll master file, where almost every record is accessed when the weekly payroll is processed. In such case, a sequentially ordered file would be more efficient.

40. **Web Casting:** Web casting is a media presentation distributed over the Internet using streaming media technology to distribute a single content source to many simultaneous listeners/viewers. A webcast may either be distributed live or on demand. Essentially, webcasting is “broadcasting” over the Internet.
41. **Multiplexer:** It is a device that enables several devices to share one communication line. The multiplexer scans each device to collect and transmit data on a single line to the CPU, and also communicates transmission from the CPU to the appropriate terminal linked to the multiplexer. The devices are polled and periodically asked whether there is any data to transmit.
42. **Data Centre:** It is a centralized depository for the storage, management and discrimination of data and information. It can be defined as highly secure, fault-resistant facilities, hosting customer equipment that connects to telecommunications networks.
43. **Open Source Software:** Open Source software is created by generous programmers and released into the public domain for public use. There is usually a copyright notice that must remain with the software product. Open Source software is not public domain in that the company or individual that develops the software retains ownership of the program but the software can be used freely. Many popular Open Source applications are being developed and upgraded regularly by individuals and companies that believe in the Open Source concept.
44. **ASCII Code:** ASCII stands for **American Standard Code for Information Interchange** and is used extensively in small computers, peripherals, instruments and communication devices. It is a seven bit code that includes both unprintable control codes (0-31), used to control various devices in computer and printable control codes (32-127) that represents lower case and upper case letters, digits, punctuation marks, and other symbols. With 7 bits, up to 128 characters can be coded.
45. **ASCII-8 Code:** A newer version of ASCII is the ASCII-8 code, which is an 8-bit code. With 8 bits, the code capacity is extended to 256 characters. This includes graphics, symbols and mathematical representations.
46. **Algorithm:** A specific procedure that exists as a finite list of instructions specifying a sequence of operations and that give the answer to any problem of a given type is called an Algorithm. Computer programs are based on the concept of an algorithm.
47. **Database Designer:** Database designer is responsible for identifying the data to be stored in the database for choosing appropriate structures to represent and store the data.
48. **Web Information Server:** This type of server employs HTML templates and scripts to generate pages incorporating values from the database in them. These types of servers are stateless servers. Such servers include Netscape Server, HAHT, Allaire, Sybase, and SilverStream.
49. **Active Application Server:** This type of server supports and provides a rich environment for server-side logic expressed as objects, rules and components. These types of servers are most suitable for dealing with based e-commerce and decision processing.
50. **Database Administrator (DBA):** DBA is responsible for authorization access to the database, for coordinating and monitoring its use, and for acquiring the needed software and hardware resources.

51. **Load Program:** The resultant program (after the binding) which is ready for computer execution, is called a **load program** (or load module). It is the load program that the computer actually executes.
52. **Decision Table:** A decision table is a table which may accompany a flowchart, defining the possible contingencies that may be considered within the program and the appropriate course of action for each contingency. A decision table is divided into four parts:
- Condition Stub** - (which comprehensively lists the comparisons or conditions);
 - Action Stub**- which comprehensively lists the actions to be taken along the various program branches;
 - Condition entries** - which list in its various columns the possible permutations of answer to the questions in the conditions stub); and
 - Action entries** - (which lists, in its columns corresponding to the condition entries the actions contingent upon the set of answers to questions of that column)
53. **Cold Site:** It is a type of disaster recovery plan that is devoid of any resources or equipments except air conditioning and raised flooring. Equipment and resources must be installed in such a facility to duplicate the critical business functions of an organization. Cold sites have many variations depending on their communication facilities.
54. **Hot Site:** It is also a type of disaster recovery plan that has the equipment and resources to recover business functions that are affected by a disaster. Hot sites may vary in the type of facilities offered (such as data processing, communications, or any other critical business functions needing duplication). The location and size of the hot site must be proportional to the equipment and resources needed.
55. **Source Program:** The program submitted for compilation is called a **source program** (or source module). The compiler then translates the program into machine language, producing an object program (or object module). Then, another software program called a **linkage editor** binds the object module of this program to object modules of any subprograms that must be used to complete processing.
56. **Bluetooth:** It is telecommunication industry specifications that describe how mobile phones, computer and Personal Digital Assistant (PDAs) can easily be interconnected using a short range wireless connection. It is a short distance wireless connection which use transceiver chip that transmits and receives signals in the frequency band of 2.5 GHz. Using this technology, user of cell phones, pagers and PDAs can buy a 3-in-one phone that can double as a portable phone at home or in the office, get quickly synchronized with information in a desktop or a notebook computer, initiate the sending or receiving of a file, initiate a print- out, and, in general, have all mobile and fixed computer devices be totally coordinated. Connection can be point to point or multipoint. The maximum range is 10m and data can be transmitted at a rate of 1mbps. It has built-in encryption and verification system.
57. **Electronic Fund Transfer:** EFT represents the way the business can receive direct deposit of all payments from the financial institution to the company bank account. This payment mechanism moves money between accounts in a fast, paperless way. Some examples of EFT systems in operation are as follows.
- An Automated Teller Machines (ATMs) allows the consumer to do their banking without assistance of a human teller.
 - A Point-of-Sale (POS) Transaction allows transfer of funds electronically from the consumer's account to the merchant's account while transacting.
 - Preauthorized Transfers authorizes the bank or a third party to withdraw or deposit the funds from or into account holder's bank account.

- d. Telephone Transfers allows transfer of funds from one consumer account to another consumer account by telephonic instruction.

- 58. **Internet Surfing:** Many of the servers on the Internet provide information, specializing on a topic or subject. When a user is looking for some information, it may be necessary for him to look for such information from more than one server. WWW links the computers on the Internet, like a spider web, facilitating users to go from one computer to another directly. When a user keeps hopping from one computer to another, it is called "surfing".
- 59. **Credit Cards:** In a credit card transaction, the consumer presents preliminary proof of his ability to pay by presenting his credit card number to the merchant. The merchant can verify this with the bank, and create a purchase slip for the consumer to endorse. The merchant then uses this purchase slip to collect funds from the bank, and, on the next billing cycle, the consumer receives a statement from the bank with a record of the transaction.
- 60. **Electronic Cheques:** Credit card payments will undoubtedly be popular for commerce on the Internet. However, the following two systems namely FSTC and Cyber cash have been developed to let consumers use electronic cheques to pay Web merchants directly.
- 61. **Smart Cards:** Smart cards have an embedded microchip instead of magnetic strip. The chip contains all the information a magnetic strip contains but offers the possibility of manipulating the data and executing applications on the card. Three types of smart cards are: Contact Cards, Contactless Cards and Combi Cards.
- 62. **Electronic Purses:** Electronic purse is another way to make payments over the net which is very similar to a pre paid card and can be used as an ATM card as well as a credit card. While making purchases, customers pass their cards through a vendor's point of sale terminal and validation is done through a Personal Identification Number (PIN Number). No credit check or signature is needed.

Encryption: Encryption allows information to transit the Internet while being protected from interception by eavesdroppers. There are two basic approaches to encryption:

- a. **Hardware encryption devices:** They are available at a reasonable cost, and can support high-speed traffic.
- b. **Software encryption:** It is typically employed in conjunction with specific applications. Certain electronic mail packages, for example, provide encryption and decryption for message security.

Message Authentication: Message authentication makes sure that a message is really from whom it purports to be and that it has not been tampered with. Regardless of a company's individual needs, clearly defined Internet security policies and procedures should always be part of any corporate Internet security strategy.

- 63. **Fifth Generation Language:** A fifth-generation language (abbreviated 5GL) is a programming language based around solving problems using constraints given to the program, rather than using an algorithm written by a programmer. This way, the programmer only needs to worry about what problems need to be solved and what conditions need to be met, without worrying about how to implement a routine or algorithm to solve them. These are used mainly in Artificial intelligence research, fuzzy logic and neural network

64. **Entity and Relationship: Entity:** An entity is defined as distinguishable object that exists in isolation and is described by a set of attributes. An entity may be physical object such house or a car; and event such as a house sale or a car service or a concept such as customer transaction or order.

Relationship: A relationship is an association among several entities. For examples, a works relationship between Employee and a Department, a contain relationship between an Order and Item, a perform relationship between Artist and songs.

65. **Incremental Backup:** This uses the DBBACKUP utility to copy the transaction log file since the most recent full backup. When incremental backup is performed, the mirror log is not backed up. When the users take the backup and rename the log files, the transaction and mirror log file is renamed and new log files are created.
66. **Protocol:** A protocol is a set of conventions or rules that must be adhered by both the inter-computer communication parties to ensure that the information being exchanged between the two parties is received and interpreted correctly. In other words, Protocol is software that performs variety of actions necessary for data transmission between computers. A protocol defines the following three aspects of digital communications.
- Syntax:** The format of data being exchanged, character set used, types of error correction used, type of encoding scheme (e.g. signal levels) being used.
 - Semantics:** Type and order of messages used to ensure reliable and error free information transfer.
 - Timing:** Defines data rate selection and correct timing for various events during data transfer.

Wireless LAN: Wireless Local Area Network (WLAN) is a flexible data communications system that does not require any physical media or cables for data transmission. Using Radio Frequency (RF) technology, Wireless LANs transmit and receive data over the air. Users can access shared information without any plug in or without any physical connection. Wireless LAN configurations range from simple peer-to-peer topologies to complex networks offering distributed data connectivity, flexibility and mobility.

E-mail: E-mail is a method of composing, sending, storing and receiving messages over electronic communication systems. The term e-mail applies both to the Internet e-mail system based on the Simple Mail Transfer Protocol (SMTP) and to intranet systems allowing users within one company to e-mail each other.

67. **File Transfer Protocol (FTP):** The File Transfer Protocol (FTP) is used widely on the Internet for transferring files to and from a remote host. FTP is commonly used for uploading pages to a Web site and for providing online file archives. An FTP URL has the basic form: ftp://user:pass@host/directory/file.
68. **Internet Browser:** An Internet Browser or a web browser is a software application that enables a user to display and interact with text, images, and other information typically located on a web page at a website on the World Wide Web or a LAN by means of hyperlinks. Web browsers available for personal computers include Microsoft Internet Explorer, Mozilla Firefox, Apple Safari, Netscape, and Opera.
69. **Internet Server:** An Internet Server is a special computer build up with high quality components and is stored in data centre to ensure better Internet connectivity across the world for sharing of information.

70. **Device Drivers:** Device drivers are small files that act as an interface between hardware in a computer system and the operating system. Hardware requires device drivers so that the operating system can “see” the devices and handle them effectively and efficiently.
71. **Local Area Network (LAN):** A LAN is a computer network covering a small physical area, like a home, office, or small group of buildings, such as a school. The defining characteristics of LANs include usually higher data-transfer rates, smaller geographic range and lack of a need for leased telecommunication lines. A LAN is useful for sharing resources like files, printers, games or other applications.
72. **Network Interface Card (NIC):** Network Interface Card constructs, transmits, receives, and processes data to and from a host to network. Each NIC has 8 bytes permanent and unique MAC (Media Access Control) address which is known as Physical Address and is provided by the manufacturer.
73. **Internet Protocol (IP):** The Internet Protocol (IP) is a Network-layer (Layer 3) protocol that contains addressing information and some control information that enables packets to be routed.
74. **Gateways:** Gateways can translate data from one protocol to another and are usually used to link LANs of different topologies, e.g., Ethernet and Token Ring, so enabling the exchange of data.
75. **Operating System:** An Operating system is system software which is an interface between the user of a computer and the computer hardware. The purpose of an operating system is to provide an environment in which a user may execute programs. The operating system controls and coordinates the use of the hardware among the various systems programs and application programs for the various users.
76. **Graphical User Interface:** A graphical user interface (GUI) is a human-computer interface that uses windows, icons and menus and which can be manipulated by a mouse. GUI is a user-friendly graphics oriented environment. Presently most of the operating systems like Windows, Linux, etc. are providing excellent support to GUI.
77. **Virtual Memory:** Virtual memory is a construct used to provide separate memory spaces for different process, i.e. virtual memory allows each program to have an independent view of the memory space that is not restricted by other programs or the actual size of physical memory
78. **Bug:** A mistake in the design of a program or a computer system, or an equipment fault.
79. **Time sharing:** A technique or system for furnishing computing services to multiple users simultaneously, providing rapid responses to each of the users. Time sharing computer systems employ multi programming and/or multiprocessing techniques and are often of serving users at remote locations via data communication network.
80. **Debug:** To trace and eliminate mistakes in a program or faults in equipment. The process is often assisted by a diagnostic routine.
81. **Data Independence:** A database system keeps data separate from the application that uses the data. It means changes can be made to data definitions without making changes to every application program that uses the data. Program maintenance costs (i.e. cost of upgrading application programs) can be substantially reduced.
82. **Data Dictionary / Directory:** A Data Dictionary is a set of metadata that contains definitions and representations of data elements. It maintains information pertaining to structure and usage of data and meta data.

83. **DBMS:** DBMS is a set of software programs that manages the database files. DBMS accesses the files, updates the records and retrieves the requested data.
84. **Operational Database:** Operational databases store detailed data needed to support the operations of the entire organization. They are also called subject area databases (SADB), transaction databases, and production databases. Examples are a customer database, personnel database, inventory database, and other databases containing data generated by business operations.
85. **Management Database:** These databases store data and information extracted from selected operational and external database. They consist of summarized data and information most needed by the organization's managers and other end users. Management databases are also called information databases.
86. **Information warehouse Database:** An information warehouse stores data from current and previous years. This is usually data that has been extracted from the various operational and management databases of an organization.
87. **Distributed Database:** These are databases of local work groups and departments at regional offices, branch offices, manufacturing plants, and other work site.
88. **End user Database:** These databases consist of a variety of data files developed by end users at their workstations. For example, users may have their own electronic copies of documents they generated with word processing packages, Spreadsheet packages, DBMS packages or received by electronic mail.
89. **External Database:** Access to external, privately owned online databases or data banks are available for fee to end users and organizations from commercial information services. Data is available in the form of statistics on economic and demographic activity from statistical data banks
90. **Text Database:** Text databases are natural outgrowth of the use of computers to create and store documents electronically. Text databases use software to create, store, search, retrieve, modify, and assemble documents stored as text data in such databases.
91. **Image Database:** A wide variety of images can also be stored electronically in image databases. Image database management software allows employees to hold millions of pages of document images. Workers can view and modify documents at their own workstations and electronically transfer them to the workstations of other end users in the organization.
92. **Object Oriented Database:** Object Oriented Databases are new structures which can handle the drawings, charts, multimedia documents, video clips, programs, and other objects generated by these systems can vary tremendously in type, length, content, and form such information.
93. **Client-Server Database:** Client-server is computing architecture which separates a client from a server, and is almost always implemented over a computer network. Each client or server connected to a network can also be referred to as a node. The most basic type of client-server architecture employs only two types of nodes: clients and servers.
94. **Knowledge Database:** A database system provides functions to define, create, modify, delete and read data in a system. The type data maintained in a database system historically has been declarative data describing the static aspects of the real world objects and their associations.
95. **Online Backup:** Database backup which is performed while the database is being actively accessed is called on-line backup. An online database backup can be performed by executing the command-line or from the 'Backup Database' utility.

96. **Offline Backup:** Performance of backup when the database is shutdown is called offline backup. When a database goes through a normal shutdown process i.e. the process is not being cancelled the database engine commits the data to the database files.
97. **Live Backup:** Live Backup is carried out by using the BACKUP utility with the command-line option. A live backup provides a redundant copy of the transaction log for restart of our system on a secondary machine in the event the primary database server machine becomes unusable.
98. **Full database backup:** For a full backup, the database backup utility copies the database and log. A full backup captures all files on the disk or within the folder selected for backup. With a full backup system, every backup generation contains every file in the backup set.
99. **Incremental Backup:** An incremental backup uses the DBBACKUP utility to copy the transaction log file since the most recent full backup. When we perform an incremental backup, the mirror log is not backed up. When we backup and rename the log files, the transaction and mirror logs file are renamed and new log files are created. One must plan to manually backup the mirror log.
100. **Data warehouse:** A data warehouse is a computer database that collects, integrates and stores an organization's data with the aim of producing accurate and timely management information and supporting data analysis.
101. **Data Transformation:** The Data Transformation layer receives data from the data sources, cleans it and standardizes it and loads it into data repository. Transformation of data can be done either manually or through a specific type of software.
102. **Data Mining:** Data mining is concerned with the analysis of data and the use of software techniques for finding patterns and regularities in sets of data.
103. **Index Field:** Index fields are used to store relevant information along with a document. The data input to an index field is used to find those documents when needed. The program provides up to twenty-five user-definable index fields in an index set.
104. **File maintenance:** The updating of a file to reflect the effects of period changes by adding, altering data; e.g., the addition of new programs to program library on magnetic disk.
105. **File processing:** The periodic updating of master files to reflect the effect of current data, often transaction data contained in detail files; e.g., a weekly payroll run updating the payroll master file.
106. **Decision table:** A table listing all the contingencies to be considered in description of a problem, together with the corresponding actions to be taken. Decision tables permit complex decision-making criteria to be expressed in a concise and logical format.
107. **Real time (or Real-time):** Pertaining to fast-response online computer processing, which obtains data from an activity or process, performs computations, and returns a response rapidly enough to control, direct or influence the outcome of the activity or process.
108. **File Server:** It is a computer system used for the purpose of managing the files, servicing the network printers, handling network communications and other functions. A server may be dedicated or non-dedicated.
109. **Work Station:** Workstations are normally intelligent systems, such as IBM PC. PCs load programs and data from server and do the processing on their own. After processing the files are again stored in the server.
110. **Twisted pair Cables:** Two insulated wires are twisted around each other. It is inexpensive and easy to install. They can handle data communications with speeds up to 10 mbps over limited distances.

111. **Coaxial Cables:** Coaxial cables are commonly used to connect computers and terminals in a local area such as an office, floor, building or campus. This cable is conventionally used for cable television network.
112. **Fiber Optic Cables:** Fiber optic cables use light as the communication medium. To create the on-and-off bit code needed by computers, light is rapidly turned on and off inside channel. Fiber optic cables are light weight and can handle huge amount of data. Data is more secure in fiber optic networks
113. **MAN:** A Metropolitan Area Network (MAN) is somewhere between a LAN and a WAN. Sometimes MAN refers to a network that connects systems or local area networks within a metropolitan area. Cable television networks are best examples of MANs that distribute television signals
114. **VPN:** A VPN is a private network that uses a public network to connect remote sites or users together. Instead of using a dedicated, real-world connection such as leased line, a VPN uses "virtual" connections routed through the Internet from the company's private network to the remote site or employee. VPNs can be one of two types: Intranet-based and extranet Based.
115. **MODEM:** Modem stands for Modulator/Demodulator. A modem is a device that converts digital signals from a computer's serial port to the analog signals required for transmission over traditional telephone lines, and vice versa. The speed at which a modem transmits data is measured in units called bits per second or bps.
116. **Routers:** Router computers are similar to bridges but have the added advantage of supplying the user with network management utilities. Routers help administer the data flow by such means as redirecting data traffic to various peripheral devices or other computers.
117. **Remote Access Devices:** Remote access devices are modem banks that serve as gateways to the Internet or to private corporate networks. Their function is to properly route all incoming and outgoing connections.
118. **Netscape:** A WWW Browser and the name of a company. Netscape Corporation also produces web server software. Netscape provided major improvements in speed and interface over other browsers.
119. **PPP – (Point to Point Protocol):** Most well known as a protocol that allows a computer to use a regular telephone line and a modem to make TCP/IP connections and thus be really and truly on the Internet.
120. **Host:** Any computer on a network that is a repository for services available to other computers on the network.
121. **HTML – (Hyper Text Markup Language):** The coding language used to create Hypertext documents for use on the World Wide Web. HTML looks a lot like old fashioned typesetting code, where you surround a block of text with codes that indicate how it should appear. HTML files are meant to be viewed using a World Wide Web client Program, such as Netscape Navigator, Internet Explorer or Mosaic.
122. **Browser:** A Client program (software) that is used to look at various kinds of Internet resources. Mosaic, Netscape. Navigator and Internet Explorer are some of the commonly used browsers.
123. **Client:** A software program that is used to contract and obtain data from a Server software program on another computer, often across a great distance. A web Browser is a specific kind of Client.
124. **Mobile Commerce:** Mobile Commerce or M-Commerce is about applications and services that are accessible from Internet-enabled mobile devices. M-commerce (mobile commerce) is the buying and selling of goods and services through wireless handheld devices such as cellular telephone and personal digital assistants (PDAs) Known as next-generation e-commerce.

125. **Encryption:** Encryption allows information to transit the Internet while being protected from interception. In other words encoding of the data is called encryption. There are two basic approaches to encryption Hardware encryption and software encryption.
126. **Firewalls:** They control the flow of traffic between the Internet and the firm's internal LANs and systems. They are setup to implement the security policies desired by the organization. A firewall is a proved, effective means of protecting the firm's internal resources from unwanted intrusion.
127. **Smart Card:** Smart cards have an embedded microchip instead of magnetic strip. The chip contains all the information a magnetic strip contains but offers the possibility of manipulating the data and executing applications on the card.
- Three types of smart cards have established themselves.**
 - Contact Cards;
 - Contact less Cards and combi cards.
128. **Electronic Cheque:** An electronic cheque has all the features as a paper cheque. It acts as a message to the sender's bank to transfer funds. Like a paper cheque, the message is first given to the receiver who, in turn, endorses the cheque and presents it to the bank to obtain funds. The electronic cheque can prove to be superior to the paper cheque in one significant aspect. The sender can protect himself against fraud by encoding the account number with the bank's public key.
129. **SCM:** Supply Chain Management (SCM) is the process of planning, implementing and controlling the operations of the supply chain with the purpose to satisfy customer requirements in an efficient way.
130. **SCEM:** Supply Chain Event Management is a consideration of all possible occurring events and factors that can cause a disruption in a supply chain. With SCCEM, possible scenarios can be created and solutions can be planned. Bull whip effect: The Bullwhip Effect or Whiplash Effect is an observed phenomenon in forecast driven distribution channels.

Business-to-Customer (B2C): It is defined as the exchange of services, information and/or products from a business to a consumer. B2C electronic commerce is a form of electronic commerce in which products or services are sold from a firm to a consumer.

Unguided Media: Unguided transmission media or Unbound Media consists of a means for the data signals to travel but nothing to guide them along a specific path. The data signals are not bound to a cabling media. Some of the common examples of unguided media are Radio wave, Microwave and Infrared wave. These are described as follows:

Radio Waves: Radio waves are an invisible form of electromagnetic radiation that varies in wavelength from around a millimeter to 100,000 km, making it one of the widest ranges in the electromagnetic spectrum. Radio waves are most commonly used transmission media in the wireless Local Area Networks.

Micro Waves: Microwaves are radio waves with wavelengths ranging from as long as one meter to as short as one millimeter, or equivalently, with frequencies between 300 MHz (0.3 GHz) and 300 GHz. These are used for communication, radar systems, radio astronomy, navigation and spectroscopy.

Infrared Waves: Infrared light is used in industrial, scientific, and medical applications. Night-vision devices using infrared illumination allow people or animals to be observed without the observer being detected. Infrared tracking, also known as Infrared Homing, refers to a passive missile guidance system which uses the emission from a target of electromagnetic radiation in the infrared part of the spectrum to track it

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