Question and Answers Document

1. \*\*What is an information retrieval system?\*\*  
  
An information retrieval system (IRS) is a system that helps users find information from a collection of documents. IRSs typically use a variety of techniques to index and search documents, including full-text search, keyword search, and Boolean search.  
  
2. \*\*Contrast differences between IRS and DBMS?\*\*  
  
An information retrieval system (IRS) is a system that helps users find information from a collection of documents. A database management system (DBMS) is a system that helps users store and manage data. The main difference between an IRS and a DBMS is that an IRS is designed for searching documents, while a DBMS is designed for storing and managing data.  
  
3. \*\*Illustrate the Inverted File structure and PAT Data structure ? Pg. No. [82]\*\*  
  
An inverted file is a data structure that stores information about the terms that appear in a document. Each term is associated with a list of documents that contain the term. The PAT data structure is a data structure that stores information about the patterns that appear in a document. Each pattern is associated with a list of documents that contain the pattern.  
  
4. \*\*Multimedia Database Search Pg. [20]\*\*  
  
Multimedia database search is a type of information retrieval that is used to search for multimedia data, such as images, videos, and audio files. Multimedia database search typically uses a variety of techniques to index and search multimedia data, including content-based retrieval, feature-based retrieval, and query-by-example retrieval.  
  
5. \*\*Explain the terms i) Recall ii) Precision Pg. No. [5]\*\*  
  
Recall is a measure of how many relevant documents are retrieved from a collection of documents. Precision is a measure of how many of the documents that are retrieved are relevant.  
  
6. \*\*Explain the Total Information Retrieval System? Pg. No. [10-17]\*\*  
  
A total information retrieval system (TIRS) is a system that helps users find information from a variety of sources, including documents, images, videos, and audio files. TIRSs typically use a variety of techniques to index and search information, including full-text search, keyword search, and Boolean search.  
  
7. \*\*Explain Digital Libraries and Dataware House? Pg. No. [21-22]\*\*  
  
A digital library is a collection of digital objects, such as documents, images, videos, and audio files. A data warehouse is a collection of data that is used for analysis. Digital libraries and data warehouses are typically stored in a database management system (DBMS).  
  
8. \*\*Explain the conditions of Porter Stemming Algorithm —\_? Pg. No. [75-77]\*\*  
  
The Porter stemming algorithm is a stemming algorithm that is used to reduce words to their root form. The algorithm is based on a set of rules that are applied to words.  
  
9. \*\*Explain the PAT Data structure? — Pg. No. [88-93]\*\*  
  
The PAT data structure is a data structure that stores information about the patterns that appear in a document. Each pattern is associated with a list of documents that contain the pattern.  
  
10. \*\*Two-level Bayesian networks with neat diagram pg. No. [61]\*\*  
  
A two-level Bayesian network is a Bayesian network that has two levels of nodes. The first level of nodes represents the variables that are being modeled, and the second level of nodes represents the factors that influence the variables.  
  
11. \*\*Explain\*\*  
  
(a) Canned Query pg. No. [43]  
  
A canned query is a query that is pre-defined and stored in a database. Canned queries can be used to quickly and easily retrieve information from a database.  
  
(b) Bigrams, Trigrams and Pentagrams [85]  
  
A bigram is a sequence of two words. A trigram is a sequence of three words. A pentagram is a sequence of five words. Bigrams, trigrams, and pentagrams can be used to represent the context of a word.  
  
(c) N-Gram [85]  
  
An n-gram is a sequence of n words. N-grams can be used to represent the context of a word.  
  
12. \*\*What are Classes of Automatic Indexing pg No. [106]\*\*  
  
There are three main classes of automatic indexing:  
  
\* Full-text indexing: This type of indexing stores the entire text of a document.  
\* Keyword indexing: This type of indexing stores a list of keywords that appear in a document.  
\* Phrase indexing: This type of indexing stores a list of phrases that appear in a document.