



MENOFIYA UNIVERSITY
FACULTY OF COMPUTERS AND INFORMATION
Department: General
Course Title: Information Retrieval
Midterm Exam

Date: 5th April 2023

Time: 50 Minutes

Name : ----- Department: ----- Academic no.:-----

Answer the following questions:

Questions 1:

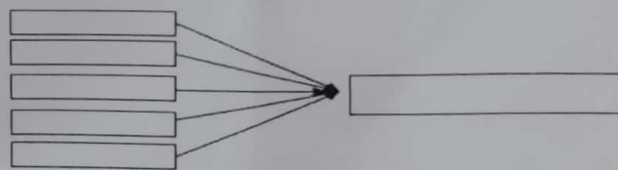
- 1) An inverted index arranges data in a sorted order as per
 - a) the documents
 - b) the frequency of each document
 - c) the frequency of each term
 - d) the terms
- 2) What is the disadvantage of Boolean retrieval model?
 - a) Easy to implement
 - b) Difficult to rank output
 - c) Difficult to process a query
 - d) It is one of the complex retrieval model
- 3) A data structure that maps terms back to the parts of a document in which they appear is called
 - a) Lexicon
 - b) Dictionary
 - c) Inverted index
 - d) All of the above
- 4) In thesaurus-based query expansion technique, for every term t in a query, we expand the query using the synonyms and related words of t taken from the thesaurus. This can increase _____
 - a) precision
 - b) recall
 - c) performance
 - d) mean average precision
- 5) Which of the following is a non-decreasing function of the number of documents retrieved?
 - a) precision
 - b) recall
 - c) accuracy
 - d) mean average precision
- 6) In tokenization language issues we may use
 - a) package splitter
 - b) symmetric splitter
 - c) compound splitter
 - d) all of the above
- 7) The study of identifying the meaningful parts of words, i.e. prefixes, suffixes and roots.
 - a) lemmatization
 - b) stemming
 - c) morphological analysis
 - d) both a,b

- 8) Each item in the list is called as _____.
- a) Items c) Query
b) Posting d) Information
- 9) etr term is called _____ k-grams wildcard query.
- a)3 c)1
b)4 d)2
- 10)Term document incidence matrix is
- a) Sparse c) Dense
b) Depends upon the data d) Cannot predict
- 11)is usually provided by most modern information retrieval systems.
- a) Information and knowledge retrieval c) Information and data retrieval
b) Information or knowledge retrieval d) Information or data retrieval
- 12) Which of the following is correct search statement for "Select all items that discuss software and not storage or hardware in the item"?
- a) SOFTWARE OR (STORAGE NOT HARDWARE) c) SOFTWARE AND NOT STORAGE OR HARDWARE
b) SOFTWARE OR STORAGE NOT HARDWARE d) SOFTWARE OR NOT STORAGE AND HARDWARE

Questions 2:

a)

- 1) Write down the entries in the permuterm index dictionary that are generated by the term bord.



- 2) If the given Query is:"bo*d" which entry from the previous permuterm index dictionary will be used to look up with?

b) Complete the following term-document incidence matrix for these documents collection.

Doc 1 breakthrough drug schizophrenia
Doc 2 new schizophrenia drug
Doc 3 new approach treatment schizophrenia
Doc 4 new hopes schizophrenia patients

	Doc 1	Doc 2	Doc 3	Doc 4
Approach				
breakthrough				
drug				
hopes				
new				
patients				
schizophrenia				
treatment				

what are the returned results for this query: drug AND Not Schizophrenia