

LP III (oral sample questions)  
(unit 1 to 6 units) theory  
Assignment 1

- Q. 1) Difference between data retrieval & information retrieval.
- 2) What is Conflation algorithm. explain its steps.
  - 3) What is Luhn's idea, explain the sections in it.
  - 4) What are stopwords?
  - 5) What is document representative?
  - 6) Explain indexing, Exhaustivity & Specificity.
  - 7) Five commonly used measures of association in information retrieval.
  - 8) Why normalized versions of the simple matching coefficient are used for measures of association.

Assignment 2

- Q. 1) What is clustering? Types of clustering.
- 2) Explain single pass clustering algorithm.
  - 3) Explain cluster using similarity measures.
  - 4) IR models.
  - 5) Boolean search.
  - 6) What is multi pass clustering technique.
  - 7) Explain clustering using dis-similarity matrix. Also explain effect of threshold on clustering.
  - 8) Explain K-List.
  - 9) Explain cluster based retrieval.
  - 10) Explain working ofocchio's algo.

### Assignment - 3

- Q. 1) What are Inverted files?
- 2) What is indexing?
  - 3) What is Vocabulary & occurrences.
  - 4) How search is carried out on inverted index.
  - 5) How to index multimedia object.
  - 6) Limitations of Inverted Index.
  - 7) What is suffix-array & Suffix tree?
  - 8) What is the concept of Signature files?
  - 9) Working of inverted files.
  - 10) What are applications of Inverted index.
  - 11) Working of Signature files.

### Assignment - 4

- Q. 1) What is Precision & recall in IR system?
- 2) What is relevance of document?
  - 3) What are the metrics to measure Information Systems?
  - 4) How are Precision & recall calculated for information systems. (formulas)?
  - 5) What is the problem with these two measures?
  - 6) What is Precision-Recall trade off?

## Assignment - 5

- Q. 1) What is harmonic mean (F-measure) & E-measure in IR Systems?
- 2) How are (F-measure) & E-measure Calculated. (Formulae)?
- 3) What is difference between (F-measure) & E-measure?
- 4) What are the metrics to measure information systems?
- 5) What is the advantage of (F-measure) & E-measure?

## Assignment - 6

- Q. 1) What is extraction (or Feature Extraction)?
- 2) How images are indexed?
- 3) Explain how Color is extracted from an image.
- 4) What is multimedia IR? Discuss Steps on which data retrieval relies.
- 5) What is use of image features?
- 6) Enlist Some of the Features of image & its applications.
- 7) How to Compare two images & calculate the relevancy?
- 8) Applications of feature extraction.



## Assignment - 5

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## Assignment - 7

- Q. 1) What are search engines? Name few of them.  
2) How search engine works?  
3) What is web crawling?  
4) What is robot exclusion protocol (robot.txt)?  
5) What is the significance of robot.txt?  
6) What is Page rank?  
7) What is Significance of dampening factor?  
8) What are the crawler architectures.  
9) What are the strategies used by crawler.  
10) Explain Harvest architecture.  
11) Explain the working of Google crawler.  
12) Explain challenges involved in searching web.

## Assignment - 8

- Q. 1) What are APIs & their use?  
2) How to use API?  
3) Which API you have used in your assg. 8  
(We have used open weather map API)?  
4) Explain API you have used in assg. 8

## Assignment - 9

- Q. 1)
- 1) What is Case Study?
  - 2) On which topic you have done case study?
  - 3) What are recommendation systems?
  - 4) How are recommendation systems classified (or types)?
  - 5) Explain Collaborative Filtering recommendation of documents & products.
  - 6) Explain Content based Filtering recommendation of documents & products.