

## Unit-I INTRODUCTION TO WEB DATA MINING

- \* Need
- \* Importance
- \* Applications of Web Data mining
- \* Capturing-users web
- \* activities
- \* Client side v/s middleware v/s server side-data and usage logging
- \* Web
- \* Mining and its types
- \* Web Usage Mining
- \* Web Structure Mining
- \* Web Content
- \* Mining

## Unit-II WEB USAGE MINING

- \* Learning from Browser
- \* Server Logs
- \* Identifying frequent item sets
- \* pattern
- \* identification
- \* representing patterns in form of relations/Graphs
- \* Understanding
- \* web application or website- Usage
- \* Heat maps
- \* Using statistical tools for usage
- \* analysis and machine learning for prospective improvements
- \*

### Unit-III WEB STRUCTURE MINING

- \* Understanding link structure of the web
- \* Static v/s dynamic linking
- \* representing
- \* the link structure as graphs
- \* identifying most / least used links
- \* paths
- \* Categorizing
- \* links based on required attributes
- \* Clustering links based on required attributes
- \* Web as a graph
- \* identifying nodes
- \* edges
- \* in-degree
- \* out- degree
- \* HITS Algorithm
- \* Page Rank algorithm

### Unit-IV WEB CONTENT MINING

- \* Storing web content as text
- \* database
- \* various document types
- \* generating meta-
- \* information of web documents
- \* labelling
- \* tagging
- \* identifying feature sets

- \* Representing web documents
- \* Vector Space Model
- \* TF-IDF
- \* web-page
- \* summarization
- \* tokenization
- \* n-gram analysis
- \* categorizing web pages based on
- \* required attributes
- \* Clustering web pages based on required attributes