

University of Mumbai

Examinations May-June 2022

Program: Information Technology

Curriculum Scheme: Rev2016

Examination: BE Semester VIII

Course Code: (ITDLO8042) and Course Name: Information Retrieval System

Time: 2 hour 30 minutes

Max. Marks: 80

Q1.	Choose the correct option for following questions. All the Questions are compulsory and carry 02 marks each.
1.	The interpretation of a document content involves-----
Option A:	Extracting syntactic and semantic information from the document text
Option B:	Extracting syntactic information from the document text
Option C:	Extracting semantic information from the document text
Option D:	Extracting symbols from the document text
2.	The user for a retrieval system has to translate the information in to-----
Option A:	Query in the language by the system
Option B:	Answers in the language by the system
Option C:	Task in the language by the system
Option D:	Key in the language by the system
3.	-----is a critical data structure which allows fast searching over large volume of data
Option A:	array
Option B:	loop
Option C:	arrow
Option D:	Index
4.	-----is a high level interactive navigation structure and consists of nodes which are correlated by directed link in a graph structure
Option A:	Substring
Option B:	Hypertext
Option C:	Hierarchical
Option D:	Fixed
5.	The input for -----is a sequence of single word or phrases with a maximum allowed distance between them
Option A:	Proximity query
Option B:	Boolean query
Option C:	Fuzzy query
Option D:	Phrase query
6.	The most used types of patterns are-----
Option A:	Words, prefixes, suffixes, substrings, Ranges
Option B:	Sentences, documents, letters
Option C:	Paragraphs, Ranges, words
Option D:	Boolean text, semantic words, prefixes

7.	Single word queries can be searched using -----data structure to speed up d search
Option A:	Hashing
Option B:	Content search
Option C:	Sequential search
Option D:	Index data structure
8.	_____ allows user to define new tags, defines more complex structure and has data validation capabilities
Option A:	Markup
Option B:	tags
Option C:	XML
Option D:	SGML
9.	-----is composed of two elements vocabulary and occurrences
Option A:	inverted file structure
Option B:	Indexed file structure
Option C:	Indexed file structure
Option D:	Non Indexed file structure
10.	The _____ visualization represents text in a manner resembling columns of newspaper text, with one 'line' of text on each horizontal line of the strip.
Option A:	Data
Option B:	Graph
Option C:	See Hard
Option D:	See Soft

Q2	Solve any Two Questions out of Three	20M(10 marks each)
A	What Information Retrieval system?. Explain Taxonomy of the Information Retrieval Models with diagram.	
B	What are the different indexing techniques are available in Information Retrieval? Explain any one in detail.	
C	What is Text compression? With example discuss Huffman coding compression techniques on words.	

Q3	Solve any Two out of Three	20M (10 marks each)
A	What is Keyword based querying? Discuss context queries and Boolean queries in detail with example.	
B	Describe Inverted files and how does signature index structure helps in indexing a text collection to speed up the searching task.	
C	What is Markup Language? How SGML and HTML does help in formatting the text? Discuss in detail	

Q4	Solve any Two out of Three	20M(10 marks each)
A	Define Structured Text Retrieval Models and differentiate between Model Based on Non-Overlapping Lists and Model Based on Proximal Nodes with examples.	
B	What are the different classical information retrieval models available? Explain any one in detail.	
C	What Human computer Interaction? List design principles. How does Information access process system helps as a tool to achieve goal, explain with diagram.	