Total No. of Questions : 8] **SEAT No. :**

P553 **[Total No. of Pages : 2**

[6004]-488
B.E. (Computer Engineering)
INFORMATION RETRIEVAL
(2019 Pattern) (Semester - VII) (Elective - IV) (410245 (A))

Time : 2½ Hours] ***[Max. Marks : 70***

Instructions to the candidates:

1) ***Solve Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6, Q.7 or Q.8.***
2) ***Figures to the right side indicate full marks.***
3) ***Neat diagram must be drawn wherever necessary.***
4) ***Assume suitable data if necessary.***

Q1) a) Enlist the General-Purpose Data Compression techniques and explain with suitable examples. **[9]**

b) Write a short note on. **[9]**

i) Nonparametric Gap Compression.

ii) Parametric Gap Compression.

iii) Context-Aware Compression Methods.

OR

Q2) a) Write a short note on. **[9]**

i) Modeling and Coding.

ii) Huffman Coding.

iii) Arithmetic Coding.

b) Describe Dynamic Inverted Indices like Incremental Index Updates, Contiguous Inverted Lists and Noncontiguous Inverted. **[9]**

Q3) a) Explain Categorization and Filtering with any two detailed Examples. **[9]**

b) Explain the Information-Theoretic Model in detail. **[8]**

OR

Q4) a) Explain probabilistic Classifiers & Generalized Linear Models. **[9]**

b) Describe Language Models and Smoothing. **[8]**

Q5) a) Explain MeasuringEffectiveness like Traditional effectiveness measure and the text retrieval conference (TREC) with suitable examples. **[9]**

b) Write a short note on: **[9]**

i) Nontraditional effectiveness measures.

ii) Measuring efficiency.

OR

P.T.O.

Q6) a) Explain Query Scheduling and Caching with suitable examples. **[9]**

b) Write a short note on: **[9]**

i) Using statistics in evaluation.

ii) Minimizing adjudication Effort.

Q7) a) Describe Parallel Query Processing with suitable examples. **[8]**

b) Write a short note on: **[9]**

i) The structure of the web.

ii) Quires and Users.

iii) Static ranking.

OR

Q8) a) Describe Map Reduce with suitable examples. **[9]**

b) Write a short note on: **[8]**

i) Evaluation web search.

ii) Web Crawlers.

iii) Web crawler libraries.

iv) Dynamic ranking.

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