

# SPPU-BE-COMP-CONTENT – KSKA Git

Total No. of Questions : 8]

SEAT No. :

PA-918

[Total No. of Pages : 2

**[5927]-350**

**B.E. (Computer Engineering)**

**INFORMATION RETRIEVAL**

**(2019 Pattern) (Semester - VII) (410245 A) (Elective - IV)**

*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 indicate full marks.*
- 3) Neat diagrams must be drawn wherever necessary.*
- 4) Assume suitable data, if necessary.*

**Q1 ) a)** Explain Data Compression with Huffman Coding. **[9]**

b) What are the Context-Aware Compression Methods? Explain it in detail.**[9]**

OR

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

- i) Decoding Performance
- ii) Document Reordering
- iii) Arithmetic Coding

b) Explain in detail Invalidation List, Garbage Collection, Document Modifications in document deletion. **[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]**

*P.T.O.*

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- Q5 )** a) Explain 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

- Q6 )** a) What is Scheduling and Caching in Measuring Efficiency?. Explain in detail. [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 MapReduce 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

