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## Question Paper Code: 70060

B.E./B.Tech. DEGREE EXAMINATIONS, NOVEMBER/DECEMBER 2023.

Seventh Semester

Artificial Intelligence and Data Science

AD 8702 - TEXT ANALYTICS

(Regulations 2017)

Time: Three hours

Maximum: 100 marks

Answer ALL questions.

PART A —  $(10 \times 2 = 20 \text{ marks})$ 

- 1. Mention the use of Rapid Automatic Keyword Extraction.
- 2. Differentiate precision and recall.
- 3. What is Latent morpho-semantic analysis?
- 4. Define PARAFAC2 method.
- 5. Write short note on nonnegative matrix factorization.
- 6. Define information gain.
- 7. What is visualization?
- 8. Write a note on Future Lens.
- 9. Define feature extraction.
- 10. What is semantics?

PART B — 
$$(5 \times 13 = 65 \text{ marks})$$

11. (a) Outline the steps in RAKE algorithm.

Or

(b) What is stoplist? Outline the steps in stoplist generation with an example.

12. (a) Illustrate K-means clustering with an example.

Or

- (b) Discuss Tucker 1 method for document clustering with an example.
- 13. (a) Explain any one machine-learning algorithms, which have been successfully used in text classification with suitable example.

Or

- (b) What is spam email classification? Outline the steps with an example.
- 14. (a) Elaborate Data Exploration with an example.

Or

- (b) Discuss the adaptive threshold method for anomaly detection.
- 15. (a) Explain vector space modeling with an example.

Or

(b) Explain latent semantic analysis with an example.

PART C — 
$$(1 \times 15 = 15 \text{ marks})$$

16. (a) Discuss the Adaptive threshold setting in novelty mining.

Or

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(b) Outline the steps in embedding semantics in LDA topic modells with an example.