

Question Paper Code: 71208

M.E./M.Tech. DEGREE EXAMINATION, JUNE/JULY 2013.

Elective

Computer Science and Engineering

CS 9264/CS 964/UCP 9164/10244 CSE 51 —DATA WAREHOUSING AND DATA MINING

(Common to M.E. – Software Engineering/M.Tech. - Information Technology/ M.Tech. – Multimedia Technologies and M.E. – Networking and Internet Engineering)

(Regulation 2009/2010)

Time: Three hours

Maximum: 100 marks

Answer ALL questions.

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

- 1. Mention any two benefits of data warehousing.
- 2. State any two differences between the technical metadata and business metadata.
- 3. What is data discretization?
- 4. What is frequent item set? Give an example.
- 5. Mention the use of decision tree.
- 6. What is lazy learner? Give an example.
- 7. Define categorical variable. Give an example.
- 8. Mention the different between agglomerative and divisive hierarchical clustering.
- 9. State the two basic measures of text retrieval.
- 10. What is the spatial-to spatial dimension? Give an example.

PART B — $(5 \times 16 = 80 \text{ marks})$

11. (a) Explain the various components of data warehousing with neat diagram in detail.

Or

- (b) Discuss about the online analytical processing and multidimensional data analysis.
- 12. (a) Explain about data cleaning, data integration and transformation with an example for each.

Or

- (b) Describe any two efficient and scalable frequent item set mining methods with an example for each.
- 13. (a) Discuss Bayesian and rule based classification methods with an example for each.

Or .

- (b) Write and explain backpropagation algorithm and its network structure and weight adjustment in detail.
- 14. (a) Discuss k-Means and k-Medoids classical partitioning methods and their variations with an example for each.

Or

- (b) Why is outlier mining important? Briefly describe the different approaches for outlier and analysis.
- 15. (a) Write about spatial and multimedia data mining in detail.

Or

(b) Explain the different approaches to text and web mining briefly.

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