



SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY Siddharth Nagar,
Narayanavanam Road, Puttur – 517583

QUESTION BANK (DESCRIPTIVE)

Subject with Code : Data warehousing and Mining(18MC9116)

Course & Branch: MCA

Year & Sem: II-MCA & I-Sem

Regulation: R18

UNIT –I

Introduction

- | | |
|---|-----|
| 1. Explain Major issues in Data Mining and Classification of Data Mining | 12M |
| 2. Explain Data Preprocessing Techniques | 12M |
| 3. Explain the following concepts | |
| (a) Relational Databases | 04M |
| (b) Outlier Analysis | 04M |
| (c) Numerosity Reduction | 04M |
| 4. Explain Mining Frequent Patterns and Associations. | 12M |
| 5. Explain Advanced Data and Information Systems and Advanced Applications | 12M |
| 6. (a) What are Data Mining and Explain Data Mining Task Primitives? | 06M |
| (b) Explain Data Reduction Techniques. | 06M |
| 7. (a) Describe Data Integration and Transformation? | 06M |
| (b) Explain Data cleaning as a process and Correlations. | 06M |
| 8. Explain | |
| (a) Noisy Data | 03M |
| (b) Attribute Subset Selection | 03M |
| (c) Cluster Analysis | 03M |
| (d) Classification and Prediction | 03M |
| 9. (a) Explain Data Mining Functionalities and what Kind of pattern can be mined. | 06M |
| (b) Explain Data Discretization and Concept hierarchy generation. | 06M |
| 10. (a) Describe Data Warehouses and its Importance. | 06M |
| (b) Explain Data Descriptive Data Summarization. | 06M |

UNIT –II**Data Warehouse and OLAP Technology for Data Mining**

1. (a) What is indexing OLAP data? 06M
(b) Explain Multidimensional Data Model. 06M
2. (a) Explain Data Warehouse Implementation. 06M
(b) Describe Meta Data Repository? 06M
3. Explain Data Warehouse Architecture. 12M
4. (a) What is Star net Query Model for Querying? 06M
(b) Describe from Data Warehousing to Data Mining 06M
5. (a) Describe efficient methods for Data cube Computation 06M
(b) Explain BUC: Computing Iceberg Cubes from the Apex Cuboid Downward. 06M
6. (a) Explain Constrained Gradient Analysis in Data Cubes 06M
(b) Write Pre computing Shell Fragments for Fast High-Dimensional OLAP. 06M
7. (a) Describe Attribute Oriented Induction. 06M
(b) Explain Data Generalization and Concept Description. 06M
8. (a) Explain Mining Class Comparisons and Class Description. 06M
(b) Describe Complex Aggregation at Multiple Granularities. 06M
9. Explain Star-Cubing: Computing Iceberg Cubes. 12M
10. Write Data cube computation and Data Generalization? 12M

UNIT-I-III**Mining Frequent Patterns, Associations and Correlations**

- | | | |
|-----|--|-----|
| 1. | Explain basic concepts of Mining frequent patterns. | 12M |
| 2. | Explain scalable frequent item set Mining methods. | 12M |
| 3. | (a) What is Clustering methods and high dimensional data? | 06M |
| | (b) Explain Time series and sequenced data. | 06M |
| 4. | Explain Bayesian and Rule based Classification with examples. | 12M |
| 5. | (a) Explain Classification by Decision Tree Induction. | 06M |
| | (b) Explain Classification by Back propagation. | 06M |
| 6. | (a) Describe issues regarding classification and prediction. | 04M |
| | (b) Explain Accuracy and Error measures. | 08M |
| 7. | Explain Ensemble Methods. | 12M |
| 8. | (a) Describe support vector Machines? | 06M |
| | (b) Describe Associative Classification. | 06M |
| 9. | Describe Mining Data Streams and Lazy Learners. | 12M |
| 10. | (a) Explain the evaluating the accuracy of a Classifier and Predictor. | 06M |
| | (b) Explain from Association Mining to Correlation Analysis. | 06M |
| 11. | Explain Classification and Prediction. | 12M |
| 12. | Explain | 12M |
| | (a) Rough Set Approach | |
| | (b) Bayesian Belief Networks | |
| | (c) k-Nearest-Neighbor Classifier | |
| 13. | Explain | 12M |
| | (a) Genetic Algorithm | |
| | (b) Bootstrap | |
| | (c) Nonlinear Regression | |

UNIT-IV**Cluster Analysis Introduction**

- | | |
|--|-----|
| 1. (a) What is Partitioning Methods? | 04M |
| (b) Explain the types of Data in Cluster Analysis? | 08M |
| 2. (a) Explain Mining Data Streams. | 06M |
| (b) Describe Constraint based Cluster Analysis. | 06M |
| 3. Explain Clustering High Dimensional Data. | 12M |
| 4. Explain the following | |
| (a) DENCLUE | 04M |
| (b) Wave Cluster | 04M |
| (c) DBSCAN | 04M |
| 5. Explain the Mining Time-Series Data. | 12M |
| 6. (a) What is Outlier Analysis? Explain it clearly. | 06M |
| (b) Describe Density based Outlier detection | 06M |
| 7. (a) What is biological sequences and hidden markov model? | 06M |
| (b) Explain Multi relational Data Mining. | 06M |
| 8. Explain the Graph Mining and Social Network Analysis | 12M |
| 9 (a) Explain Mining Sequence Patterns in Biological Data. | 06M |
| (b) Explain Hierarchical Methods. | 06M |
| 10. Explain the Grid based methods. | 12M |

UNIT-V**Mining Object, Spatial, Multimedia, Text and Web Data**

- | | |
|--|-----|
| 1. (a) What is Generalization of Structural Data? | 06M |
| (b) Explain the Spatial Data Mining. | 06M |
| 2. (a) Explain the Multimedia Data Mining. | 06M |
| (b) Describe Data Mining Applications. | 06M |
| 3. Explain the Text Mining and its Importance. | 06M |
| 4. (a) Explain Mining the World Wide Web. | 06M |
| (b) Explain Additional Themes on Data Mining. | 06M |
| 5. Describe Social Impacts on Data Mining. | 12M |
| 6. Explain Data Mining and Collaborative Filtering. | 06M |
| 7. (a) Describe Generalization of Class Composition Hierarchies. | 06M |
| (b) Explain the Dimensionality Reduction for text. | 06M |

Prepared by: DR. A. SWARUPA RANI, Assoc. Professor, Dept. of MCA