

**IV B.Tech. II Semester Supplementary Examinations, July -2005**  
**DATA MINING AND WARE HOUSING**  
**(Computer Science & Engineering)**

**Time: 3 hours**

**Max Marks: 80**

**Answer any FIVE Questions**  
**All Questions carry equal marks**

\*\*\*\*\*

1. (a) What is a Data Warehouse? Discuss in detail.  
(b) Describe with the help of a figure the typical process flow within a Data Warehouse.
2. (a) Explain metadata and Data Marting concepts briefly with reference to data warehousing.  
(b) Draw the three tire decision support information diagram depicting the summary and detailed information.
3. Describe the following options while designing FACT table:  
(a) Identifying significant historical period.  
(b) Sampling for detailed data.  
(c) Column selection.
4. (a) Discuss data transformation and load.  
(b) Explain Query Generation.
5. (a) Explain the massively parallel processing architecture and its capabilities.  
(b) Describe the advantages and disadvantages of massively parallel processing architecture.
6. (a) Describe the role of security restrictions once the data warehouse has gone live  
(b) What are the audit requirements to impose security restrictions at the beginning of data Warehouse
7. Explain the overnight processing with respect to load estimation
8. (a) Explain the basic levels of testing a data warehouse  
(b) Explain a plan for testing the data warehouse.

\*\*\*\*\*

**IV B.Tech. II Semester Supplementary Examinations, July -2005**  
**DATA MINING AND WARE HOUSING**  
**(Computer Science & Engineering)**

**Time: 3 hours**

**Max Marks: 80**

**Answer any FIVE Questions**  
**All Questions carry equal marks**

\*\*\*\*\*

1. (a) Discuss Business Case analysis, Education and Prototyping.  
(b) Explain Business requirements analysis and technical blueprint.  
(c) Describe the requirements Evolution and History load.
2. (a) Explain with the help of a neat sketch a data warehouse with detailed data in archived storage.  
(b) What is Query Manager? How is it different from load manager?
3. (a) Explain Designing fact tables.  
(b) Explain designing of time data to store into fact table.
4. (a) Explain horizontal partitioning.  
(b) Explain vertical partitioning.
5. "Design and management of a data warehouse on an MPP system is considerably more difficult than on an AMP or cluster system". Do you support the above statement or not? Justify your stand.
6. (a) Write the basic terminology and involved in backup strategies  
(b) Describe the effect on database design while implementing backup strategy
7. Estimate the Disk space required for a data warehouse.
8. (a) Discuss the following aspects for testing a data warehouse:
  - i. Security
  - ii. disk configuration
  - iii. scheduling software.
  - iv. management tools
  - v. database management.  
(b) How is testing the database of data warehouse different from that of a conventional database system.

\*\*\*\*\*

**IV B.Tech. II Semester Supplementary Examinations, July -2005**  
**DATA MINING AND WARE HOUSING**  
**(Computer Science & Engineering)**

**Time: 3 hours**

**Max Marks: 80**

**Answer any FIVE Questions**  
**All Questions carry equal marks**

\*\*\*\*\*

1. (a) What is a Data Warehouse? Discuss in detail.  
(b) Describe with the help of a figure the typical process flow within a Data Warehouse.
2. (a) Explain metadata and Data Marting concepts briefly with reference to data warehousing.  
(b) Draw the three tire decision support information diagram depicting the summary and detailed information.
3. (a) Explain Designing dimension tables.  
(b) Explain Designing Starflake Scheme.
4. (a) When is a summary table too big to be useful ?  
(b) Relate and discuss the various degrees of aggregation within summary tables.
5. (a) Describe the issues involved in the selection of hardware architecture for data ware system.  
(b) Discuss the issues involved in the client-side of a data warehouse system.
6. (a) Give a data classification scheme of a data warehouse system  
(b) Describe user access hierarchy to access different types of data of a data warehouse
7. (a) Elaborate estimation of CPU band width for the different phases involved in loading data warehouse.  
(b) How do you estimate the memory requirement for a data warehouse.
8. (a) Explain the basic levels of testing a data warehouse  
(b) Explain a plan for testing the data warehouse.

\*\*\*\*\*

**IV B.Tech. II Semester Supplementary Examinations, July -2005**  
**DATA MINING AND WARE HOUSING**  
**(Computer Science & Engineering)**

**Time: 3 hours**

**Max Marks: 80**

**Answer any FIVE Questions**  
**All Questions carry equal marks**

\*\*\*\*\*

1. (a) Discuss Business Case analysis, Education and Prototyping.  
(b) Explain Business requirements analysis and technical blueprint.  
(c) Describe the requirements Evolution and History load.
2. (a) What is partitioning data? Discuss with an example of a partitioned retail sales fact table  
(b) Discuss about the summary information relating to the data warehouse.
3. (a) Explain Views and Synonyms on fact tables.  
(b) Explain Multidimensional Schema.
4. (a) When is a summary table too big to be useful ?  
(b) Relate and discuss the various degrees of aggregation within summary tables.
5. Describe the operational design issues involved in the data warehouse system. Explain with the help of an example situation.
6. (a) Will new data sources require new security and / or audit restrictions to be implemented  
(b) Will new users be added who have restricted access to data that is already generally available?
7. (a) Is daily processing different from overnight processing for Load estimation process?  
(b) What are the system administration requirements of database siting.
8. (a) Explain the concepts, test schedule and data load for testing a data warehouse.  
(b) How are unit testing, integration testing, system testing and user acceptance testing applicable to data warehousing.

\*\*\*\*\*