Paper Code: CS-066 **Roll No.** | | | | | | | | | | |

B.Tech.
(SEM VI) EVEN SEMESTER THEORY EXAMINATION, 2015-16
DATA WAREHOUSING & DATA MINING

[Time: 3 Hours] **[Total Marks: 100]**

Note:- (i) Attempt all questions.
(ii)All question carry equal marks.

1. Attempt any TWO parts of the following:- **[10x2=20]**

(a) What is data warehouse? Draw and explain 3-tier architecture of data warehouse.
(b) What is data warehouse schema? Explain star snowflake and fact castellation schemas.
(c) An operational database has all information about the organization then why do we need a separate data warehouse? Explain.

2. Attempt any TWO parts of the following:- **[10x2=20]**

(a) What do you understand by client/server computing model. Describe important types of client server computing model.
(b) What is data transformation? Why data transformation is required explain in brief? Describe the essential phases of data transformation.
(c) Why data cleaning is required? Explain essential types of data cleaning methods.

3. Attempt any TWO parts of the following:- **[10x2=20]**

(a) Define and describethe concepts of mining the association rules in large database.
(b) Write and describe an algorithm to find frequent data set from the database with an example.
(c) What is characterization (attribute relevance)? Explain the data generalization and summarization based characterization.

4. Attempt any TWO parts of the following:- **[10x2=20]**

(a) Describe classification and prediction? Explain the classification based on decision tree?
(b) Describe neural network. Describe the classification by back propagation.
(c) What is cluster analysis? Explain partition based clustering algorithms.

5. Attempt any TWO parts of the following:- **[10x2=20]**

(a) What is basic purpose of data warehouse? Describe the important categories of decision support tools.
(b) Explain the following:
(i) OLAP (ii) MOLAP (iii) HOLAP
(c) How would you secure a data warehouse? Explain the different types of data warehouse backup and recovery methods.