Registration no: | | | | | | | | | | |

Total Number of Pages: 2 **M.TECH**
IMPE207

2nd Semester Regular / Back Examination – 2014-15
DATA WAREHOUSING & DATA MINING
BRANCH(S): Industrial Engineering

Time: 3 Hours **Max marks: 70**

Q.Code: T525

Answer Question No.1 which is compulsory and any five from the rest.
The figures in the right hand margin indicate marks.

Q1 Answer the following questions: (2 x 10)

a) What is Knowledge Discovery in Databases? How does it relate to mining?
b) Differentiate between operational and informational Data Store.
c) What are multidimensional databases? How do they play an important role in data warehouse?
d) What are the tangible benefits of data warehouse?
e) Can a data mining system generate only interesting patterns? Justify.
f) List out the classification of Data Mining System.
g) What do you mean by association rule mining?
h) What is a decision tree? What are the measuring factors of data mining?
i) Differentiate classification and clustering.
j) Differentiate between page mining and web mining.

Q2 a) What is data warehousing? Draw a block diagram of data warehouse and explain each part of it . (5)
b) Explain client-server architecture of a data warehouse with all its generations. Write advantages and disadvantages of all generations? (5)

Q3 a) What is the role of Datamart in a data warehouse? Explain with example, (5)
b) Give an account of performance consideration of data warehouse. (5)

Q4 a) Differentiate OLAP and OLTP. Explain with example. Give an account of OLAP tools. (4)
b) Explain the implementation of data warehouse for a Inventory system. (6)

Q5 a) What is meant by association rule mining? Explain the apriori association rule mining with an example. (5)
b) How discovery differs from predictions in data mining? (5)

Q6 a) Discuss about k-Nearest neighbor classifiers and case-based reasoning. (5)
b) What is a decision tree? What are the measuring factors of data mining? Explain. (5)

Q7 a) Describe different types of neural networks. How neural networks help in classification? (5)
b) What do you mean by clustering? How clustering techniques helps in decision making? Explain with an example. (5)

Q8 Write Short Notes (Any Two) (5 x 2)

a) Facts and Dimensions
b) DW for retail sales
c) Partitioning
d) CLARA