Reg. No. :

# **Question Paper Code: 35025**

B.E. / B.Tech. DEGREE EXAMINATION, NOV 2017

Fifth Semester

Computer Science and Engineering

01UCS505- DATA WAREHOUSING AND DATA MINING

(Regulation 2013)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions.

# PART A - $(10 \times 2 = 20 \text{ Marks})$

- 1. Define a data warehouse.
- 2. Why data transformation is essential in the process of Knowledge discovery.
- 3. What is dimensionality reduction?
- 4. Mention the features of in business applications using OLAP.
- 5. List the functionalities of data mining.
- 6. What is interestingness of a pattern?
- 7. Compare Boolean association rule mining and quantitative association rule mining.
- 8. State the interesting measures of an association rule.
- 9. Mention the advantages of hierarchical clustering.
- 10. What are the challenges of outlier detection?

## PART - B ( $5 \times 16 = 80$ Marks)

11. (a) Discuss the various types of warehouse schema with suitable example. (16)

### Or

- (b) Discuss about the concept of Mapping the data warehouse to a multiprocessor architecture. (16)12. (a) Describe about the various OLAP operations in multidimensional model. (16)Or (b) Describe the various Reporting and Query tools their application. and (16)13. (a) Discuss the various data mining techniques. (16)Or (b) Explain about the architecture of a typical data mining system with diagram. (16)14. (a) Discuss Apriori algorithm with a suitable example and explain how its efficiency can be improved. (16)Or (b) Differentiate Classification and Prediction. Explain the issues regarding classification and prediction. (16)
- 15. (a) Describe about the categorization of major clustering methods. (16)

Or

(b) Explain the K-means clustering with an example. (16)