**Code No: I0505/R16**

### M. Tech. I Semester Regular Examinations, January-2017
# DATA WAREHOUSING AND DATA MINING
### [Computer Science (05)]

**Time: 3 Hours**                                                   **Max. Marks: 60**

*Answer any FIVE Questions*
*All Questions Carry Equal Marks*

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|---|---|---|---|
| 1. | a | What is data warehouse? How it is different from DBMS and meta data? | 6 |
| | b | Write short notes on Data extraction, Transformation tools and clean up operations. | 6 |
| 2. | a | What is OLAP? Explain the need for multidimensional data model. | 6 |
| | b | Discuss the OLAP Tools and Internet. How to transform data ware house to data mining using OLAP? Explain. | 6 |
| 3. | a | What is data mining? Explain its functionalities to mine various kinds of patterns. | 6 |
| | b | How to integrate data mining system with a database or data warehouse system? Explain. | 6 |
| 4. | a | Why the data has to be preprocessed? Explain the role of descriptive data summarization techniques in it. | 6 |
| | b | Discuss the major issues in data mining. | 6 |
| 5. | a | Explain the process of mining multilevel association rules. | 6 |
| | b | Write short notes on | 6 |

          i)      Frequent item sets.
          ii)     Closed Item sets.

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| 6. | a | What is Bayes theorem? Explain Naïve Bayes classification with suitable example. | 6 |
| | b | Differentiate between prediction and classification. And also explain various regression based methods. | 6 |
| 7. | a | What is cluster analysis? Explain the typical requirements of cluster Analysis. | 6 |
| | b | Explain the following Grid based clustering methods: | 6 |

          i)      STING
          ii)     Wave Cluster.

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|---|---|---|---|
| 8. | a | Differentiate between agglomerative and hierarchical clustering. | 6 |
| | b | How to cluster the high dimensional data? Explain various algorithms in it. | 6 |

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