III B.Tech. II Semester Supplementary Examinations Nov/Dec 2016
Data Warehousing and Mining
(Information Technology)

Max. Marks: 70   Time: 3 Hours

Answer *any* **five** questions
All Questions carry equal Marks (**14 Marks** each)
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1. a) Explain the process of knowledge discovery in databases. 7M
   b) Describe the characteristics of data sets having a significant impact on the data mining techniques. 7M

2. a) Why computing the proximity between two attributes is often simpler than computing the similarity between two objects? Explain. 7M
   b) Explain Simple Matching Coefficient, Jaccard Coefficient & Cosine Similarity. 7M

3. a) Explain the methods for indexing OLAP data. 7M
   b) Describe the differences between OLTP & OLAP. 7M

4. a) Show that the entropy of a node never increases after splitting it into smaller successor nodes. 7M
   b) Describe the characteristics of decision tree induction algorithms. 7M

5. a) How do you estimate the conditional probabilities for continuous attributes in naïve Bayes classifiers? 7M
   b) Explain the characteristics of Naïve Bayes classifiers. 7M

6. Explain the Frequent Itemset Generation in FP-Growth Algorithm with an example. 14M

7. a) Mention the strengths and weaknesses of K-means algorithm. 5M
   b) Explain Bisecting K-means algorithm with an example. 9M

8. a) Explain the key issues in Hierarchical Clustering. 7M
   b) Explain DBSCAN algorithm. 7M

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III B.Tech. II Semester Supplementary Examinations Nov/Dec 2016
Object Oriented Analysis and Design
(Common to CSE & IT)

Max. Marks: 70   **Time: 03 Hours**

Answer *any* **five** questions
All Questions carry equal marks (14 Marks each)
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1.	a)	Define UML. Explain the artifacts of a Software Intensive System.	8M
	b)	Discuss four kinds of things in the UML.	6M
2.	a)	Explain four adornments that apply to associations. Discuss behavioral diagrams.	6M
	b)	Discuss Behavioral diagrams.	8M
3.	a)	Explain different Classifiers and their pictorial representations in UML.	8M
	b)	Discuss three levels of visibility in UML.	6M
4.		Briefly explain about Modeling techniques in interaction Modeling.	14M
5.	a)	Discuss the utility of use case diagram.	6M
	b)	Draw and use case diagram for a typical railways reservation system.	8M
6.	a)	What are State Machines?	7M
	b)	Define the components of Advanced behavioral Modeling.	7M
7.	a)	Differentiate between components and classes. Explain with an example.	7M
	b)	Define processor and device. How do you model processor and devices.	7M
8.	a)	Draw the use case diagram for the library system and explain relationships.	6M
	b)	What are the packages in the library system? Explain.	8M

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