## **GUJARAT TECHNOLOGICAL UNIVERSITY** ME - SEMESTER- IV • EXAMINATION – SUMMER 2015

Su	bject	Code: 740201 Date: 01/05/2015	
Su Tir Ins	bject ne: tructio 1. 2. 3.	Name: Advance Databases Total Marks: 70   2:30 pm to 5:00 pm Total Marks: 70   ons: Attempt all questions.   Make suitable assumptions wherever necessary. Figures to the right indicate full marks	
Q.1	(a) (b)	Define Normalization. Explain 3NF, BCNF and 4NF with example. Describe Deferred database modification and explain with suitable example.	07 07
Q.2	(a) (b)	Define Transaction. Explain steps of transaction life cycle with diagram. Explain various Transformation rules for Expression transformation in query processing.	07 07
	(b)	OR Explain Steps for manning an EEP scheme to an ODB Scheme	07
Q.3	(b) (a) (b)	Describe major issues with data mining. Explain transaction server with process structure for client/server model.	07 07 07
Q.3	(a) (b)	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	07 07
Q.4	(a) (b)	Fig.1 In the context of Querying and transformation, explain XPath and XQuery. Explain ECA Model for Active Database.	07 07
Q.4	(a) (b)	Describe parallel databases and explain various architectural models for it. In the context of distributed database, Define data fragmentation and explain techniques for it.	07 07
Q.5	(a) (b)	List goals of data base tuning. Explain tuning of database design Explain any one methods of Access control for database security. OR	07 07
Q.5	(a) (b)	Define referential integrity. Explain Assertions and Triggers. Explain Two phase locking protocol.	07 07

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