Seat No.: _____   Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER–VII • EXAMINATION – SUMMER • 2014

Subject Code: 170708   **Date: 31-05-2014**
Subject Name: Web Data Management
Time: 02:30 pm - 05:00 pm   **Total Marks: 70**
Instructions:
1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Q.1	**(a)**	Explain Web Data Management with XML.	**07**
	(b)	"An XML document is a labeled, unranked, ordered tree." Explain with example.	**07**
Q.2	**(a)**	Express the following formulas in MathML: 1) $x2 + 4x + 4$ 2) $x^{a+2} + y$	**07**
	(b)	Discuss importance of DTD and XSD with example.	**07**
		OR	
	(b)	How semistructure data model resolves issues in existing web data management?	**07**
Q.3	**(a)**	Discuss FLWOR expression with example.	**07**
	(b)	What is XPath Axes? Describe following Axes in brief. 1) Axes 2) Sibling 3) descendant 4) parent 5) attribute 6) self 7) preceding 8) descendant-or-self 9) child 10) ancestor	**07**
		OR	
Q.3	**(a)**	Discuss XPath and XQuery With examples.	**07**
	(b)	Explain Navigational XPath and XQuery Syntax with example.	**07**
Q.4	**(a)**	Differentiate between ranked trees and unranked trees.	**07**
	(b)	Explain XML evaluation techniques.	**07**
		OR	
Q.4	**(a)**	What is Ontology? Discuss RDF with example.	**07**
	(b)	Explain Graph semistructured data and graph bisimulation.	**07**
Q.5	**(a)**	What is Distributed System? Discuss failure management in brief.	**07**
	(b)	Explain Web graph mining and hot topics in web search.	**07**
		OR	
Q.5	**(a)**	Explain Ontology based mediation with example.	**07**
	(b)	Discuss Required properties of a distributed system.	**07**

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