GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER–VII (OLD) EXAMINATION – SUMMER 2019

Subject Code: 170708   **Date: 10/05/2019**

Subject Name:Web Data Management

Time: 02:30 PM TO 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)**	Discuss: XML fulfill requirements for semi structured data model.	**07**
	(b)	What is XPath Axes? Describe following Axes in brief.	**07**

    1. Sibling   3. Attribute   5. ancestor
    2. Descendant   4. preceding   6. child

Q.2	**(a)**	Describe doc() and collection() function with suitable example.	**07**
	(b)	Explain XUpdate With Example.	**07**

OR

	(b)	Explain FLWOR expression based on XQuery.	**07**

Q.3	**(a)**	Discuss DTD and XSD in detail.	**07**
	(b)	What is graph bisimulation? Explain in Detail.	**07**

OR

Q.3	**(a)**	Describe Failure management in distributed system.	**07**
	(b)	Differentiate ranked trees and unranked trees.	**07**

Q.4	**(a)**	Describe RDF and RDFS in detail.	**07**
	(b)	Explain Web crawling process in details.	**07**

OR

Q.4	**(a)**	Explain Web graph mining and hot topics in web search.	**07**
	(b)	Explain Global-as-view (GAV) and Local-as-view (LAV) mediation with example.	**07**

Q.5	**(a)**	How data can be exchanged between applications using XML.	**07**
	(b)	What is XPath?	**07**

Consider bib.xml and write XPath for following.
1. Find all books with a price of $39.95
2. Find the title of book where last name of author is Stevens
3. Find the title of all books published before 1995

OR

Q.5	**(a)**	Explain Recovery techniques of a Distributed system.	**07**
	(b)	What is XQuery?	**07**

Consider bib.xml and write Xquery for following
1. List books published by Addison-Wesley after 1991, including their year and title.
2. Delete year attribute.