GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER– VIII (New) EXAMINATION – WINTER 2019

Subject Code: 2180713   **Date: 29/11/2019**

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)**	What is DTD? How DTD is declared in XML document? Explain with an example.	**03**
	(b)	Write sort note on XML Schema.	**04**
	(c)	Explain XML Data Model with example.	**07**
Q.2	**(a)**	Explain Ontology based mediation with example	**03**
	(b)	Differentiate well-formed and valid XML document.	**04**
	(c)	What is XPath? Describe XPath data model with an example.	**07**
		OR	
	(c)	Explain XQuery syntax with suitable example.	**07**
Q.3	**(a)**	Differentiate between ranked trees and unranked trees.	**03**
	(b)	Explain OWL with an example.	**04**
	(c)	What is web crawling? Explain in details.	**07**
		OR	
Q.3	**(a)**	Explain following terms with example in Distributed system. 1) Reliability 2) Scalability 3) Availability.	**03**
	(b)	Discuss FLWOR expression with example.	**04**
	(c)	What is Ontology? Discuss RDF with example.	**07**
Q.4	**(a)**	Discuss failure management in distributed system.	**03**
	(b)	What is the use of Graph Bisimulation in Web Data Management? Discuss in brief	**04**
	(c)	Explain web graph mining with an example.	**07**
		OR	
Q.4	**(a)**	Explain filtering with an example.	**03**
	(b)	Discuss required properties of distributed system.	**04**
	(c)	Explain XML evaluation techniques.	**07**
Q.5	**(a)**	What is the significance of tree based form and serialized form of XML?	**03**
	(b)	Explain Fragmentation of XML document in detail.	**04**
	(c)	Discuss Required properties of a distributed system	**07**
		OR	
Q.5	**(a)**	Write down basic building blocks of XML	**03**
	(b)	Explain XLink and XPointer with example.	**04**
	(c)	Discuss the goals of Data integration in web data management.	**07**

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