

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**BE - SEMESTER-VII(OLD) • EXAMINATION – WINTER 2016**

**Subject Code: 170708****Date: 18/11/2016****Subject Name: Web Data Management (Department Elective-1)****Time: 10:30 AM to 01:00 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 in Detail Web Data Management with XML **07**  
(b) How semi structure data model resolves issues in existing web data management? **07**
- Q.2** (a) What is XPath? Describe XPath axes in brief. **07**  
(b) Write sort note on FLWOR expression with suitable example. **07**
- OR**
- (b) What is XQuery? Describe doc() and collection() function with suitable example. **07**
- Q.3** (a) Explain Automata on Ranked Trees in detail. **07**  
(b) What is XML Typing? Why it is essential in web data management. **07**
- OR**
- Q.3** (a) Explain XML evaluation techniques. **07**  
(b) Write sort note on XML Schema. **07**
- Q.4** (a) What is Ontology? Describe RDF, RDFS in Brief. **07**  
(b) Why querying data through ontology is different from querying traditional DBMS. **07**
- OR**
- Q.4** (a) Explain the Bucket algorithm of Local-as-view mediation. **07**  
(b) Write sort note on Peer-to-peer data management system. **07**
- Q.5** (a) Describe Failure management in distributed system. **07**  
(b) Explain Hash-based distributed access structure in brief. **07**
- OR**
- Q.5** (a) Write sort note on Distributed system. **07**  
(b) Explain following terms in brief: **07**  
1. Web Crawler  
2. OWL

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