

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**BE - SEMESTER-VII EXAMINATION – WINTER 2015**

**Subject Code: 170708****Date:04/12/2015****Subject Name: Web Data Management (Department Elective-I)****Time: 10:30am to 1:00pm****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 XML Data Model with example. **07**  
 (b) Discuss: XML fulfill requirements for semistructured data model. **07**
- Q.2** (a) Explain in Detail Web Data Management with XML. **07**  
 (b) Explain Advanced features of XQuery with example. **07**
- OR**
- (b) Differentiate between XPath and XQuery With examples. **07**
- Q.3** (a) How to Evaluate Bottom-Up and Top-Down Tree Automata with example. **07**  
 (b) Explain XML evaluation techniques. **07**
- OR**
- Q.3** (a) What is graph bisimulation? Explain in Details. **07**  
 (b) How data can be exchanged between applications using XML. **07**
- Q.4** (a) Explain DL-LITE Ontologies in details. **07**  
 (b) Explain Ontologies with example. **07**
- OR**
- Q.4** (a) Explain Global-as-view (GAV) and Local-as-view (LAV) mediation with example. **07**  
 (b) How to use Peer-to-peer data management systems in WDM. **07**
- Q.5** (a) How to evaluate index a collection of text documents in a suitable way to efficiently answer keyword queries? **07**  
 (b) Explain Recovery techniques of a Distributed system. **07**
- OR**
- Q.5** (a) Explain following terms with example in Distributed system. **07**  
 1) Reliability 2) Scalability 3) Availability 4) Efficiency  
 (b) Explain Web graph mining and hot topics in web search. **07**

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