

**GUJARAT TECHNOLOGICAL UNIVERSITY****BE - SEMESTER–VIII (NEW) EXAMINATION – WINTER 2017****Subject Code: 2180713****Date: 07/11/2017****Subject Name: Web data Management(Departmental Elective - III)****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) Compare: HTML and XML. **03**  
(b) Explain XQuery syntax with suitable example. **04**  
(c) What is DTD? How DTD is declared in XML document? Explain with an example. **07**
- Q.2** (a) What is semi structured data? Give examples of semi structured data. **03**  
(b) Differentiate Ranked trees and Unranked trees. **04**  
(c) What is XML Typing? Why it is essential in web data management. **07**
- OR**
- (c) What is Ontology? Discuss RDF with example. **07**
- Q.3** (a) Define: Distributed system. Write down any two advantages of distributed system. **03**  
(b) Write down basic building blocks of XML. **04**  
(c) Discuss the Web Crawling process in detail. **07**
- OR**
- Q.3** (a) Explain OWL with an example. **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**
- Q.4** (a) Write down the rules of thumb for ontology development. **03**  
(b) Differentiate well-formed and valid XML document. **04**  
(c) Explain XML query evaluation techniques with example. **07**
- OR**
- Q.4** (a) List out the important XML standards. **03**  
(b) Discuss required properties of distributed system. **04**  
(c) What is XPath? Describe XPath data model with an example. **07**
- Q.5** (a) What is the significance of tree based form and serialized form of XML? **03**  
(b) Differentiate Virtual versus Materialized data integration **04**  
(c) What is FLWOR expression? Explain it syntax with suitable example. **07**
- OR**
- Q.5** (a) Discuss the goals of data integration in web data management. **03**  
(b) Discuss failure management in distributed system. **04**  
(c) Explain XLink and XPointer with example. **07**

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