

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VII (OLD) - EXAMINATION – SUMMER 2017

Subject Code: 170708

Date: 29/04/2017

Subject Name: Web Data Management (Department Elective-1)

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 semi structured data? “XML document is a semi structured data model”- Justify with suitable example. **07**
(b) Explain following terms in detail with example **07**
1. XLink 2. XPointer
- Q.2** (a) Discuss XPath and XQuery With examples. **07**
(b) Write sort note on FLWOR expression with suitable example. **07**
- OR**
- (b) Explain Advanced features of XQuery with example. **07**
- Q.3** (a) Explain Automata on Ranked Trees in detail. **07**
(b) Write DTD for the given CD_catalog.xml file **07**
- OR**
- Q.3** (a) Explain XML evaluation techniques. **07**
(b) Explain XSL in detail. **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 Web crawling process in details **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 Ontology based mediation with example. **07**
- OR**
- Q.5** (a) Explain Recovery techniques of a Distributed system. **07**
(b) For given CD_catalog.xml, Write FLOWER for following: **07**
1. Select all title where country is USA
2. Select all artist if price of cd is higher than \$11.00.
3. Remove all CD records if year is 1985.

CD_catalog.xml:

```
<catalog><cd>
    <title>Empire Burlesque</title>
    <artist>Bob Dylan</artist>
    <country>USA</country>
    <price>10.90</price>
    <year>1985</year>
</cd> </catalog>
```
