

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VIII (NEW) EXAMINATION – SUMMER 2021****Subject Code:2180713****Date:06/08/2021****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) How DTD is declared in XML document? Explain with an example. **03**
(b) Write a note on XSL. **04**
(c) Explain XPath and XQuery with example. **07**
- Q.2** (a) Differentiate between ranked trees and unranked trees. **03**
(b) Write a note on XML schema. **04**
(c) Discuss XML Data Model with example. **07**
- OR**
- (c) Explain Materialized data integration. **07**
- Q.3** (a) Compare: DTD and XSD. **03**
(b) What is typing? Explain advantages of typing? **04**
(C) Explain FLOWR expression with example. **07**
- OR**
- Q.3** (a) Explain ontology based mediation with example. **03**
(b) Write a program to verify product information data using DTD. **04**
(C) Explain web graph mining with example. **07**
- Q.4** (a) Describe following Axes in short. **03**
1. Parent 2. Attribute 3. Self
(b) Explain fragment in XML document. **04**
(C) Discuss failure management in distributed system. **07**
- OR**
- Q.4** (a) Explain Boolean queries with example. **03**
(b) Explain typical processing of XML data. **04**
(C) Discuss the goals of Data integration in web data management. **07**
- Q.5** (a) What is the significance of tree based form and serialized form of XML? **03**
(b) Discuss required properties of distributed system. **04**
(C) How do we use Peer-to-peer data management systems in WDM? **07**
- OR**
- Q.5** (a) What is Bisimulation? **03**
(b) Discuss RDF with example. **04**
(c) Explain Global-as-view (GAV) and Local-as-view (LAV) mediation. **07**
