

GUJARAT TECHNOLOGICAL UNIVERSITY**MCA Integrated - SEMESTER– VII EXAMINATION-WINTER 2021****Subject Code: 4470622****Date: 01/12/2021****Subject Name: DATA WAREHOUSING****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)** What is data warehouse? Explain the need for building a data warehouse. **07**
(b) Differentiate between Primitive data and derived data. **07**
- Q.2 (a)** What do you mean by data granularity? Explain the concerns of granularity in a data warehouse. **07**
(b) Draw and explain the data warehouse architecture **07**
- OR**
- (b)** Explain various data structures found in a data warehouse in detail. **07**
- Q.3 (a)** Write a short note on midlevel data model. **07**
(b) Explain the Normalization and De-Normalization in Data Warehouse design **07**
- OR**
- Q.3 (a)** Differentiate between data warehouse and transactional database. **07**
(b) What are profile records? Explain the concept of creating multiple profile records along with appropriate example **07**
- Q.4 (a)** What is OLAP? Explain the Various operations of OLAP **07**
(b) Explain the relation between EIS and data warehouse in detail. **07**
- OR**
- Q.4 (a)** Explain the process of relating the structured and unstructured environments of data warehouse. **07**
(b) What is EIS? State the uses of EIS. **07**
- Q.5 (a)** Discuss Unstructured Data with Proper example. **07**
(b) Explain Self Organized Map(SOM) also Discuss its Advantages **07**
- OR**
- Q.5 (a)** Explain two-tiered data warehouse in detail. **07**
(b) What is data visualization? Explain structured and unstructured data visualization in brief. **07**
