

**COMSATS Institute of Information Technology, Islamabad Campus**

**Department Of Computer Science**

**Distributed Database Systems – CSC471 BCS – VI**

**Quiz #3 Marks: 10**

**Mapped to CLO3**

**Q1:**

1. **How reliability is achieved in distributed database systems?**

Reliability is achieved in distributed database system through following:

**Commit protocols:**

* How to execute commit command for distributed transactions.
* Issue: how to ensure atomicity and durability?

**Termination protocols:**

* If a failure occurs, how can the remaining operational sites deal with it.

**Non-blocking:**

* The occurrence of failures should not force the sites to wait until the failure is repaired to terminate the transaction.

**Recovery protocols:**

* When a failure occurs, how do the sites where the failure occurred deal with it.
* Independent: a failed site can determine the outcome of a transaction without having to obtain remote information. Independent recovery ⇒ non-blocking termination

1. **Explain distributed object-oriented database management systems.**

Object Oriented Databases stores information in the structure of object. An Object is something particularly recognizable which models a genuine substance and has got state and conduct. In Article Oriented based Databases capacities of Object based worldview for Programming and information bases are consolidated due eliminate the restrictions of Relational information bases also, on the interest of some high-level applications. In this paper, need of Object information base, approaches for Object information base usage, prerequisites for information base to an Article information base, Perspectives of Object information base, design approaches for Object information bases, the accomplishments and shortcoming of Object Databases and correlation with social information base are talked about

An **object**-**oriented database** is organized around **objects** rather than actions, and data rather than logic. For **example**, a multimedia record in a relational **database** can be a definable data **object**, as opposed to an alphanumeric value.